February 4, 2022

The Honorable Chair and Members of the Hawai'i Public Utilities Commission 465 South King Street Kekuanaoa Building, 1st Floor Honolulu, Hawai'i 96813

Dear Commissioners:

Subject: Docket No. 2019-0323

Instituting a Proceeding to Investigate Distributed Energy Resource Policies Hawaiian Electric Companies' and DER Parties' Partially Stipulated Proposal for SDP Amendments and Revisions to EDRP/SDP Tariff Sheets

Pursuant to Decision and Order No. 38196 ("D&O 38196") issued on January 25, 2022, in the subject proceeding, the Hawaiian Electric Companies and the DER Parties respectfully submit their agreed-upon revisions to the Emergency Demand Response Program ("EDRP") / Scheduled Dispatch Program ("SDP") Tariff Sheets for the Commission's review and approval.

Exhibit 1 to this filing provides a narrative of the proposed program changes, including the rationale for each change.⁴ The Companies and the DER Parties are pleased to report that they were able to reach agreement on the majority of the proposed tariff revisions with a shared objective of increasing enrollment in the SDP.⁵

¹ D&O 38196 instructed the Parties to file by February 4, 2022, a Stipulated Proposal for SDP Amendments which must include specific tariff language in order to allow for implementation of any approved adjustments by March 1, 2022 (D&O 38196 at 62-63).

² The "Hawaiian Electric Companies" or the "Companies" collectively refers to Hawaiian Electric Company, Inc., Maui Electric Company, Limited, and Hawai'i Electric Light Company, Inc.

³ The "DER Parties" in this proceeding are Distributed Energy Resources Council of Hawaii, Hawaii PV Coalition, and the Hawaii Solar Energy Association.

⁴ D&O 38196 states that proposals should indicate "...where agreement has been reached, where disagreements remain, and the reasons for any disagreements." (D&O 38196 at 63.) Leading up to this filing, the Hawaiian Electric Companies, the DER Parties, and the Division of Consumer Advocacy of the Department of Commerce and Consumer Affairs (the "Consumer Advocate") have been in discussions regarding the proposed revisions included with this filing. However, the Consumer Advocate has generally not been able to come to agreement with the Companies and the DER Parties on the proposed revisions included with this filing and are therefore not part of the Stipulated Proposal being submitted herewith. It is expected that the Consumer Advocate will file its own comments, providing more specifics on where it is able to agree and not agree to the revisions proposed herein.
⁵ Consistent with D&O 38196, Exhibit 1 discusses the proposed tariff changes that were the result of discussions relating to increasing enrollment in SDP. However, the Parties were also discussing a variety of tariff changes prior to the issuance of D&O 38196 on January 25, 2022, and those proposed revisions are also reflected in the tariff revisions submitted herein.

The Honorable Chair and Members of the Hawai'i Public Utilities Commission February 4, 2022 Page 2

Hawaii PV Coalition

The Companies and the DER Parties could not come to agreement on one issue relating to compensating non-Net Energy Metering customers at retail rates for the two-hour evening dispatch window under the SDP. Consistent with D&O 38196, the Companies and the DER Parties provide an explanation of the reasons for their disagreement on this issue in Exhibit 1.

Also included with this filing are clean and blackline versions of the EDRP/SDP Tariff Sheets. Both the Hawaiian Electric Companies and the DER Parties are submitting separate versions of these tariff sheets as detailed below:

- Exhibit 2 is a clean version of the Hawaiian Electric Companies' proposed EDRP/SDP Tariff Sheets:
- Exhibit 3 provides the blackline version of Hawaiian Electric Companies' proposed EDRP/SDP Tariff Sheets;
- Exhibit 4 is a clean version of the DER Parties' proposed EDRP/SDP Tariff Sheets; and
- Exhibit 5 provides the blackline version of the DER Parties proposed EDRP/SDP Tariff Sheets. For simplicity and ease of reference, the DER Parties' proposed blackline version of Rule 31 is presented as a blackline to the Company's clean version of Rule 31.

The Hawaiian Electric Companies and the DER Parties appreciate the opportunity to submit their proposed revisions to the EDRP/SDP Tariff Sheets at this time and look forward to the Commission's feedback on this matter and intend to expeditiously implement these revisions by March 1, 2022.

Sincerely, /s/ Marissa L.L. Owens /s/ Chris DeBone **CHRIS DEBONE** MARISSA L.L. OWENS Attorney for President for Hawaiian Electric Company, Inc. Distributed Energy Resource Council of Hawaii /s/ Beren Argetsinger /s/ Isaac H. Moriwake BEREN ARGETSINGER ISAAC H. MORIWAKE KYLIE W. WAGNER CRUZ TIM LINDL Attorneys for Attorneys for

Hawaii Solar Energy Association

PROPOSED SCHEDULED DISPATCH PROGRAM ("SDP") AMENDMENTS

I. Areas of Agreement

The Stipulating Parties¹ hereby agree to the following proposed amendments to the SDP² that are intended to increase program enrollment in the near-term. The Stipulating Parties submit their proposed revisions to Rule 31 as Exhibit 2 (clean version) and Exhibit 3 (blackline version) for the Hawaiian Electric Companies, and as Exhibit 4 (clean version) and Exhibit 5 (blackline version) for the DER Parties. For simplicity and ease of reference, the DER Parties' proposed blackline version of Rule 31 is presented as a blackline to the Company's clean version of Rule 31. The proposed revisions to Rule 31 include specific tariff language that reflects the Stipulating Parties' agreed-upon amendments to the SDP as discussed further below, as well as other amendments that the Stipulating Parties had agreed to prior to the Commission's issuance of Decision & Order No. 38196, filed January 25, 2022, in Docket No. 2019-0323. The Stipulating Parties submit separate Rule 31 tariff language however to reflect differences on the areas of disagreement, as described herein.

1. To expand the addressable market for the Battery Bonus Program, provide retail compensation for exported energy during the two-hour evening peak period for non-Net Energy Metering ("NEM") customers

Currently, non-NEM customers, e.g., CGS+ customers, are disincentivized from participating in the Battery Bonus Program simply because it is more economical for them to use their battery for self-consumption and avoid retail rates during the evening, rather than export energy stored in the battery at, for example, 10.08 cents/kWh, the credit rate for CGS+ customers

¹ The "Stipulating Parties" are Hawaiian Electric Company, Inc. ("Hawaiian Electric" or "the Company"), Hawaii Solar Energy Association ("HSEA"), Hawaii PV Coalition ("HPVC"), and the Distributed Energy Resource Council of Hawaii ("DERC"). HSEA, HPVC, and DERC are referred to as the "DER Parties."

² For marketing purposes, Hawaiian Electric has branded the SDP as the "Battery Bonus Program." Accordingly, "SDP" and "Battery Bonus Program" will be used interchangeably in this document.

on O'ahu. To remove this disincentive, the Stipulating Parties agree that these non-NEM customers should be allowed to export during the two-hour period during the evening peak under the Battery Bonus Program, and be compensated at retail rates. The Stipulating Parties' rationale for this proposal is that a customer not participating in the Battery Bonus Program with a 10 kWh battery would be utilizing the charged battery to self-consume the kWh throughout the evening peak. Providing retail rate crediting for exports during the two-hour dispatch window makes the customer whole as if they used that battery for themselves.

Additional requirements for this proposed amendment are set forth below:

- 1. Non-NEM customers will receive the equivalent of the retail rate for the 2-hour dispatch period via a bill credit in the form of fixed monthly export credit.³
- 2. This retail export rate for non-NEM customers participating in Battery Bonus is also available for commercial customers.
- 3. AMI is not yet fully deployed in the Company's service territory, and the Company believes that incorporating this amendment into the Company's customer billing system, SAP, will be a complicated and lengthy effort. Because these capabilities are not currently in place, the Stipulating Parties agree that, as a proxy for actual retail rates, the Company will pay a fixed monthly export credit to participating customers. The Company will use the equation of (retail rate as of February 2022 rate (\$/kWh) non-NEM DER tariff export rate (\$/kWh)) x Committed Capacity (kW) x 70% x 2 hours x 30 days as each DER tariff will result in a different ratio. The 70% assumes that 70% of the battery capacity is resulting in export back to the electric grid and 30% is being consumed by the participating customers. Upon Commission Order of the Rule 31 amendment, the Company will file an updated cost recovery request for the new budget.

2. Allow participants to install more than 5 kW of PV generation

Currently, commercial customers with large systems under Standard Interconnection

Agreements ("SIA") are not incented to participate in the Battery Bonus Program due to the limit
of 5 kW for additional PV generation. Accordingly, to expand the Battery Bonus Program to

³ The Company proposes that this fixed monthly export credit be made available to customers participating in Grid Services Purchase Agreements ("GSPA").

commercial as well as to residential customers, the Stipulating Parties propose that the 5 kW limit for additional PV generation be removed for all customers. However, to avoid excessively large additions that counter the original intent of the Battery Bonus Program – and to incent customers to invest in new <u>batteries</u> – a cap should be applied whereby the PV can only be twice the size of the storage capacity if the PV system is already greater than 5 kW. For example, if the battery size is 5 kW, then the PV addition can be no greater than 10 kW.

The Company is comfortable agreeing to this proposed amendment because based on the Battery Bonus applications received thus far, it appears that contractors are installing the minimum amount of solar panels to participate in the program. In addition, during discussions on this proposed amendment, the Stipulating Parties confirmed that any excess export compensation credits under customers' underlying DER tariffs at the end of the year would be forfeited, which would act as a deterrent to installation of over-sized systems.

3. Increase the incentive to participate in the program

The DER Parties initially proposed that the upfront incentive be raised to further increase enrollment in the Battery Bonus Program. After consideration, the Company could not agree to an increase to the upfront incentive because it would result in additional competitive advantage over the GSPAs that the Company already has in place, and a more recent GSPA that the Company is in the process of negotiating and finalizing. In recognition of the need to quickly spur adoption in the Battery Bonus Program, the Stipulating Parties agree that participants in the Battery Bonus Program will receive a fixed monthly incentive of \$5.00/kW for the entire tenyear term of the SDP. This monthly incentive roughly matches the level of capacity incentive paid to customers participating via aggregators contracted through GSPAs. To illustrate, the

The \$5 / kW per month incentive will be in addition to the current upfront incentive.

GSPA grid service of Capacity Load Reduction pays customers \$5/kW for a four-hour commitment for 144 events in a year. While the commitment duration for the Battery Bonus Program is only two hours, Battery Bonus customers are obligated to provide this service every night of the year. In the Company's view, this nightly commitment by Battery Bonus customers justifies the proposed compensation of \$5/kW to be the same as that offered under the GSPA framework.

The following is an example of the earning potential through this increased monthly incentive: \$5/kW x 5 kW x 12 months x 10 years = \$3,000. For efficiency and ease in administration, the monthly incentive will be reflected only via a bill credit to the primary account holder; unlike the upfront incentive, the Company will not pay the monthly incentive to third-party leasing companies. The Company will issue a check to the primary account holder in January of the following year for any monthly incentive bill credit remaining at the end of an annual period.

II. Areas of Disagreement

The Stipulating Parties were unable to come to agreement on one issue relating to the first proposed amendment to allow compensation at retail rates during the two-hour evening peak period for non-NEM customers. More specifically, the Stipulating Parties disagreed on the term by which retail compensation to non-NEM customers would apply and certain related elements. Therefore, the Stipulating Parties request the Commission to rule on this issue. The Stipulating Parties' respective positions are set forth below.

Hawaiian Electric

While the Company was negotiating this stipulation with the DER Parties, the Company was also in negotiations with the winning bidder for the Company's third round of GSPAs.

Thus, it became ever more important to the Company to consider impacts that changes to the Battery Bonus Program could have on the Company's existing and future aggregators. The Company submits that for the Company and the Commission, the successful launch of the Battery Bonus Program and the delivery of grid services through the GSPAs are critical to achieving the State's clean energy goals as well as serving as near-term solutions to the retirement of the AES plant in September of this year. The Company seeks to maintain as much as possible a level playing field for both Battery Bonus and the GSPAs to succeed. For this reason, and given the emergency reserve conditions identified by the Commission, the Company decided to offer the same terms of compensation at retail rates during the evening peak to all GSPA aggregators, and has modified Rule 31 to include that commitment.

The DER Parties proposed that non-NEM customers be able to receive retail compensation for evening exports for the entire ten years of the Battery Bonus Program. After consideration, the Company believes that extending the term for retail rates that long to all Battery Bonus customers as well as customers who enroll under the GSPAs would overly inflate costs for all of these resources, which would have a negative impact on all customers. Instead, the Company offers to allow retail compensation for evening dispatch for a period of three years to align with the emergency period. The Company believes this should be a sufficient extra incentive to enroll in the program on top of the \$5/kW monthly incentive that customers will receive for the entire ten-year term of the Battery Bonus Program.

DER Parties

The Commission emphasized in D&O 38196 that the "objective of making adjustments to the SDP is to ultimately accelerate customer enrollment and provide a substantially greater amount of capacity available to meet system needs during and after the retirement of the AES

Plant."⁵ The DER Parties' focus throughout the weeks of negotiations with the Company and Consumer Advocate has been to propose such adjustments to the <u>SDP</u> in response to the Commission's directives.

The DER Parties have thus proposed amendments to the <u>SDP</u> that they believe will provide this program the best chance to succeed. To accelerate customer enrollment in the <u>SDP</u>, it is essential to expand the addressable market to non-NEM customers. A critical element to achieving this is to provide retail credit specifically for exports during the two-hour dispatch window. Providing retail credit for these exports ensures non-NEM customers are not penalized by exporting energy at a lower-than-retail rate during the dispatch window, while having to purchase the same amount of energy at the retail rate that the customer otherwise would have provided itself from the battery via self-consumption. There is no added cost to ratepayers from this approach, as the energy in question was never going to be sold by the Company and instead is used when needed most by the grid.

The goal is to accelerate SDP customer enrollment by expanding the program to the broader market, including <u>new</u> DER customers. While technically open to other customers, SDP as designed is limited to existing NEM customers; but the available NEM customer pool has proven insufficient to achieve the Commission's 50MW target for the program.⁶ For program years three to ten, customers must either continue to dispatch in accordance with the SDP schedule or transition to an alternative *dispatch* program. D&O 38196 provides guidance on BYOD 1 and BYOD 2 programs, each of which require a dispatch component to the customer

⁵ D&O 38196 at p. 35.

The DER Parties note that under the current SDP program structure, the program appears to have already gleaned much of the available pool of existing NEM customers inclined to participate, as reflected in the slowing numbers of applications. The recommendations provided herein are intended to significantly increase customer enrollment to meet the program goals.

commitment.⁷ As such, customers that sign up for the SDP will be required to dispatch for the entirety of their ten-year commitment. However, the export rate for BYOD dispatches is currently undefined, thus creating uncertainty for customers as to what they will receive for exports during the dispatch window. This reduces program appeal given the unknowns of how system operation will impact individual customer economics and system financing.

With respect to implementing the targeted retail credit mechanism, the DER Parties learned through discussions with the Company that the Company does not currently have the capabilities to directly credit non-NEM customers at retail for these exports. The Company stated this is not currently possible because (1) AMI is not yet deployed, and (2) it will take some time to update billing software to facilitate the retail crediting mechanism for non-NEM customers.

After extensive collaboration based on the shared fundamental understanding between the Company and the DER Parties that it is necessary to make these customers whole for those exports in order to remove the financial disincentive, and recognizing near-term challenges with implementing a targeted retail credit billing mechanism, the DER Parties and the Company developed the proposed proxy mechanism. The DER Parties believe the proxy mechanism represents a fair and immediately implementable *interim* solution to make these customers whole until the challenges with implementing the retail crediting mechanism are resolved. However, once AMI is deployed and the billing software updated, the DER Parties maintain that customers would transition from the interim proxy credit mechanism to the retail credit mechanism for the remainder of the program term.⁸

D&O 38196 at pp. 45-46.

For TOU customers, the DER Parties use of "retail" refers to the applicable TOU rate during the dispatch window.

The DER Parties emphasize that they fundamentally disagree with the rationale presented by the Company for limiting the retail credit to three years. Retail credit for the battery exports during grid service events is not an "incentive" for non-NEM customers. The "incentive"—or more accurately the compensation for grid services for the ten-year term—to participate in SDP is the \$850/kW upfront incentive and the \$5/kW monthly incentive. The retail credit for non-NEM customer exports during the dispatch window simply removes the disincentive that these customers face by dispatching the battery capacity during the dispatch window instead of self-consuming their self-generated energy to offset energy purchases at retail.

In this way, the retail credit for exports is akin to a decoupling mechanism for the Company: decoupling itself does not "incentivize" the Company to pursue energy efficiency or customer-installed solar; it simply removes some of the financial "disincentive" for the Company to do so. In short, retail credit for non-NEM customers does not "incentivize" participation in SDP, it simply removes some of the disincentive to do so by making the customer indifferent to when their battery is dispatched.

Because participation in SDP requires a ten-year commitment, non-NEM customers must have certainty that the described financial disincentive will be removed for the entire ten-year term. The Company's proposal to provide the retail credit for three years does not address this fundamental need.

The DER Parties understand the Company's approach to limit the retail credit component to three years as being based on concerns regarding the GSPA program. The DER Parties

The DER Parties also disagree with the Company's proposed approach in the Company's version of the Rule 31 tariff to unilaterally modify the 70% proportion factor for calculating the interim proxy retail credit. First, the interim proxy credit is intended to be in place as an interim measure. As such, an adjustment to the proportion factor adjustment will not be necessary if the Company is directed to prioritize AMI deployment for SDP customers and immediately begin work to implement the necessary billing solutions. Second, granting the Company unilateral discretion to adjust the proportion factor removes the customer certainty that this provision seeks to achieve.

believe and submit that the Company's approach inappropriately inserts GSPA issues into the SDP amendment process and distracts from the urgent need to address the Commission's clear request to provide immediate and actionable solutions to the SDP. Amendments to the SDP must be full solutions, not half-measures adopted in the name of achieving a "level playing field" with another program, developed under different circumstances and with inherent concerns of its own, which the Commission did not request the Parties address in this forum. A focus on GSPA program issues in this forum is unresponsive and counterproductive to the urgent task at hand and the DER Parties respectfully submit that GSPA issues should be addressed in another forum at the appropriate time.

The emergency situation on Oahu is now just months away. The DER Parties believe the recommendations stipulated by the DER Parties and HECO and the DER Parties recommendations to provide the retail credit mechanism for ten-years, responds to the Commission's characterization of this situation as an emergency, and its direction that the solution to this emergency requires focused, concerted efforts by all parties to develop and immediately implement workable solutions to SDP. The DER Parties recommendations are guided by over a decade of DER sales experience in Hawaii and across the country and lessons learned to date in implementing SDP. The DER Parties believe these recommendations provide SDP the best chance to succeed under the current circumstances.

Hawaiian Electric Company, Inc.

Exhibit 2
Hawaiian Electric's Proposed Revisions to
Rule No. 14H Appendix III
Rule No. 31
and
Rule No. 31 Appendix A

(Clean Version)

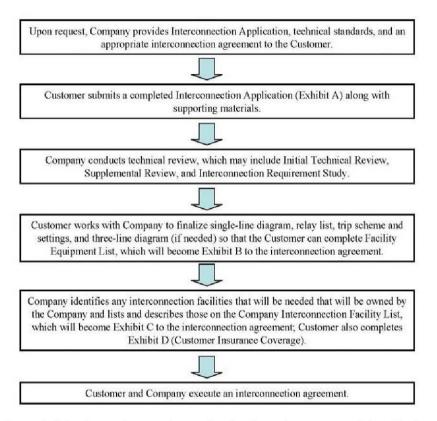
APPENDIX III Interconnection Process Overview

The purpose of this Appendix III is to provide a general overview of the process and procedures for interconnecting a Generating Facility that will operate in parallel with the Company's Distribution System. The general technical guidelines to facilitate the interconnection and parallel operation of Generating Facilities with the Company's Distribution System are set forth in Appendix I of this Rule 14H. For Generating Facilities subject to Rule 14H, if there is a conflict between the technical specifications set forth in Appendix I with any technical specifications set forth elsewhere in the Company's tariffs, the specifications of Appendix I shall prevail. Capitalized terms used in this Appendix III are defined in Appendix I of this Rule 14H.

1. Steps in the Interconnection Process

- a. The interconnection process will be initiated when a Customer approaches or contacts the Company to request interconnection of a Generating Facility to the Company's Distribution System that will operate in parallel with the Company's Distribution System. The Company shall designate a centralized point of contact for applications to interconnect a Generating Facility to the Company's Distribution System.
- b. The following flowchart provides, for illustrative purposes, the major steps in the interconnection process:

STEPS IN THE INTERCONNECTION PROCESS



c. The activities in each step shown in the flowchart are explained below:

Step 1: Within five (5) business days of receiving a Customer's request to interconnect a Generating Facility to the Company's Distribution System, the Company will provide the Customer with: (a) the Distributed Generating Facility Interconnection Standards Technical Requirements (Rule 14H Appendix I); (b) an appropriate interconnection agreement depending on the Customer's intent to export or participate in a wholesale power sale arrangement; and (c) this Interconnection Process Overview (Rule 14H Appendix III).

Step 2: The Company's interconnection review begins when a Customer submits a completed Exhibit A to Appendix II, Appendix II-A or Appendix II-B attached hereto or other Company-approved application for interconnection of a Generating Facility governed by

HAWAIIAN ELECTRIC COMPANY, INC.

Docket No. 2014-0192, D&O No. 33791 dated July 11, 2016. Transmittal Letter Dated July 18, 2016.

SHEET NO. 34D-2.1 Effective October 22, 2018

Rule 14H ("Interconnection Application").

For those Customers that apply to add a non-exporting system to their existing exporting system, such Customers shall provide the following to the Company, to the extent required to complete the Interconnection Application or otherwise requested by the Company in connection with its interconnection review: the Program System Size and Technical System Size of the existing (exporting) Generating Facility and the new Generating Facility (non-export) addition.

HAWAIIAN ELECTRIC COMPANY, INC.

Docket No. 2014-0192, D&O No. 35746 dated October 12, 2018.

Transmittal Letter Dated October 22, 2018.

Along with the Customer's Interconnection Application, the Customer must also provide the design drawings, operating manuals, manufacturer's brochures/instruction manual and technical specifications, manufacturer's test reports, bill of material, protection and synchronizing relays and settings, and protection, synchronizing, and control schemes for the Generating Facility to the Company for its review. The Company shall have the right to specify the protection and synchronizing relays and settings, and protection, synchronizing and control schemes, consistent with the technical requirements of Appendix I, that affect the reliability and safety of operation and power quality of the Company's system with which the Generating Facility seeks to interconnect ("Facility Protection Devices/Schemes"). The Company shall maintain the confidentiality of information the Customer deems confidential, unless and until a final, non-appealable Commission decision determines that disclosure is necessary to protect the public or as otherwise determined by the Commission.

Within fifteen (15) business days of the receipt of an Interconnection Application and supporting material, or such other period as is mutually agreed upon in writing by the Company and the Customer, the Company shall review the Customer's Interconnection Application and supporting material and provide written notification of its general completeness, or alternatively, incompleteness. If an Interconnection Application is deemed incomplete, the Company shall specify in a written notice the additional information that is required. The completeness determination cycle will be repeated as necessary until sufficient information is submitted by the Customer to enable the Company to review the Interconnection Application.

Step 3: Within fifteen (15) business days of the date the Customer's Interconnection

Application and supporting materials are deemed complete, the Company will complete an

HAWAIIAN ELECTRIC COMPANY, INC.

Docket No. 2014-0192, D&O No. 35746 dated October 12, 2018. Transmittal Letter Dated October 22, 2018.

Initial Technical Review of the Interconnection Application. The Company shall make a determination as to whether a Generating Facility is interconnected, designed to operate in parallel or designed to function with momentary parallel operation with the Company's electric system during the Initial Technical Review.¹ The Initial Technical Review will result in the Company providing either:

(1) Expedited Review for Self-Supply and NEM+ Systems:

Interconnection Applications for Customer Self-Supply Systems under Company's Rule 22 (Customer Self- Supply) and NEM+ Systems comprised of more than a standalone energy storage system, e.g., battery storage, under Company's Rule 27 (NEM+) that will not export power across the Point of Interconnection except as allowed under Rule 22, Rule 27 and as required under this Rule 14H, shall qualify for expedited interconnection.

(2) Simplified Interconnection or Supplemental Review: For all Interconnection Applications, other than Appendix II-B, if all of the Initial Technical Review Screens are passed, the Generating Facility qualifies for Simplified Interconnection, and an executable interconnection agreement for the Customer's signature; or, if one or more screens are not passed, notification that Supplemental Review will be required and the results, in writing, of all Initial Technical Review screenings.

If Supplemental Review is required, the Customer shall notify the Company, in writing, to proceed with the Supplemental Review, or the Customer shall agree to withdraw its

Interconnection Application. In order to expedite the process, Customer may pre-acknowledge

¹ Momentary-Parallel Systems: For Appendix II-B Applications, i.e. Application For Non-Export Distributed Generation Facilities (Momentary-Parallel Operation), if the Generating Facility is designed to operate in parallel with the Distribution System, for a duration of less than 0.1 seconds, i.e. "momentary parallel operation", then the Generating Facility qualifies for expedited interconnection. Registration shall satisfy the Customer's notice requirements set forth in Tariff Rule 3B (Change In Customer's Equipment Or Operations) and is required for purposes of determining potential load that the Company may be required to serve. Such systems shall be deemed to be "non-exporting" and shall not require reverse power protection. However, the Company may install at Company's expense, a bi-directional advanced meter. Company shall have the right to disconnect a Generating Facility without prior notice to the Customer pursuant to Rule 14H, Section 4.b, in the event the Company determines that the Generating Facility is operating in parallel with the Distribution System in excess of momentary parallel operation and Customer shall pay for any and all costs incurred by the Company in enforcing this right.

and agree to proceed to Supplemental Review, if necessary, at the time an Interconnection Application is submitted to the Company for review. Within twenty (20) business days of notification by the Customer that it would like to move forward with Supplemental Review, the Company shall complete a Supplemental Review. The Supplemental Review will result in the Company providing either: (a) Simplified Interconnection (b) interconnection requirements beyond those for a Simplified Interconnection, and a non-binding, good faith estimate of the Company's portion of the costs to perform the interconnection requirements identified by the Supplemental Review, or (c) a determination that an Interconnection Requirements Study (IRS) is required, and a good faith cost estimate and schedule for the completion of the IRS including an identification of the specific analysis and/or reviews that will be performed as part of the IRS.

If an IRS is required, the Customer shall agree to pay the cost estimate for the IRS provided by the Company, or the Customer shall withdraw its Interconnection Application. The Company shall complete the IRS within one hundred fifty (150) calendar days of the Customer's agreement to move forward with the IRS and payment of the IRS cost is received. The completion of the IRS shall include the Company's proposal to the Customer of the following:

(a) interconnection requirements and a non-binding, good faith estimate of the Company's portion of the costs to perform the interconnection requirements; and (b) protection and synchronizing relays and settings, protection, synchronizing and control schemes, and any other equipment and/or performance requirements necessary to meet the IRS requirements.

Final results of all technical screenings, Supplemental Review, and IRS will be provided in writing to the Customer.

Step 4: Based on the results of the Initial Technical Review, or Supplemental Review (if needed), or IRS (if needed), the Customer and Company will work together to finalize the single-

line diagram, relay list, trip scheme and settings, and three-line diagram, which is required in the circumstances set forth in the Interconnection Application. After finalization of the single-line diagram, relay list, trip scheme and settings, and three-line diagram (if required), the Customer will make any revisions deemed necessary to the Interconnection Application and resubmit the Interconnection Application to the Company. Resubmission will not impact the Customer's interconnection position. The Customer must also complete a Facility Equipment List, which will identify equipment, space and/or data at the Generating Facility location that must be provided by the Customer for use in conjunction with the Company's Interconnection Facilities. The Facility Equipment List will be included as Exhibit B to an interconnection agreement entered between the Company and the Customer. If requested, the Company will provide assistance to the Customer to complete the Facility Equipment List.

Step 5: Within fifteen (15) business days of the completion of all activities specified in Step 4 above, or within such other period as is mutually agreed upon in writing by the Company and the Customer, the Company will complete an identification of Interconnection Facilities that are necessary to complete the interconnection and that will be owned by the Company. A list and description of the Company's Interconnection Facilities will be included as Exhibit C to the interconnection agreement entered between the Company and the Customer. The Company and Customer shall mutually agree in writing to a schedule by which the Interconnection Facilities will be constructed and a determination of when the Customer's Generating Facility shall be connected to the Company's Distribution System. The Interconnection Facilities are project-specific, and the time to complete the facilities will depend on the complexity of the facilities required. Consistent with Section 5 of this Appendix III, the Customer shall maintain insurance coverage or be self-insured against risks arising under the interconnection agreement. The

Customer Insurance Coverage will be included as Exhibit D to any interconnection agreement entered between the Company and the Customer.

Step 6: Within five (5) business days of the completion of all activities specified in Step 5 above, the Company will provide the Customer with an executable interconnection agreement, which must be executed prior to the interconnection and parallel operation of the Customer's Generating Facility. If requested by the Customer, the interconnection agreement may be signed by the Customer and a third party that is the owner and/or operator of the Generating Facility.

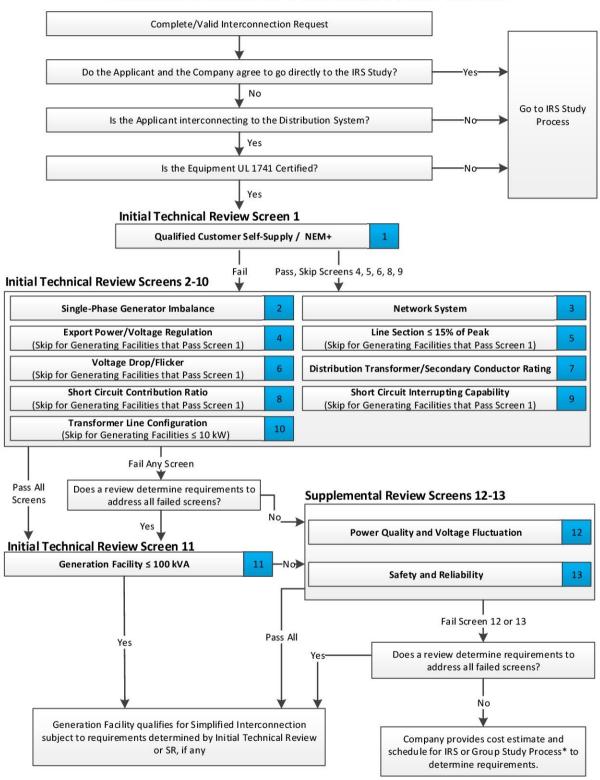
The Company will provide a fully executed interconnection agreement to the Customer:

(a) within fifteen (15) business days of receipt of Customer's executed interconnection agreement if all applicable City and/or County permits required for the Generating Facility have been closed and posted, and all Customer documentation required as a part of the interconnection agreement have been received; or (b) within fifteen (15) business days following the date upon which all applicable City and/or County permits required for the Generating Facility have been closed and posted, and all Customer documentation required as a part of the interconnection agreement have been received.

2. Overview of Technical Review Process

a. **Process Flowchart**: The following flowchart provides, for illustrative purposes, the major steps in the technical review process:

TECHNICAL REVIEW PROCESS FLOW CHART



^{* &}quot;Group Study Process" may include a consolidated IRS or a proactive utility determination of interconnection requirements covering multiple Generating Facilities.

HAWAIIAN ELECTRIC COMPANY, INC.

Docket No. 2014-0192, D&O No. 35746 dated October 12, 2018. Transmittal Letter Dated October 22, 2018.

b. **Explanation of Screens**: The following provides an explanation of the screens used in the technical review process:

Introduction:

The technical review process allows for the timely approval for the interconnection of Generating Facilities to the Company's Distribution System that will operate in parallel with the Company's Distribution System. The technical review process includes a screening to determine if a Generating Facility qualifies for Simplified Interconnection, or if Supplemental Review is needed to determine requirements, if any, beyond those of a Simplified Interconnection, or if an Interconnection Requirement Study (IRS) is needed to determine interconnection requirements. The Company will perform an Initial Technical Review unless (1) Applicant and the Company mutually agree to proceed directly to an IRS, (2) an Applicant is not connecting to the Company's Distribution System, or (3) an Applicant is interconnecting with equipment that is not UL 1741 certified, provided that the Company may permit uncertified equipment to proceed without an IRS if the equipment will provide benefits related to safety, reliability or power quality. If (1), (2), or (3) applies, the Applicant will proceed directly to an IRS.

Note: Failure to pass any screen of the Initial Technical Review process or Supplemental Review process means only that additional review is required to determine whether additional requirements, if any, are needed before the Generating Facility can be approved for interconnection with the Company's Distribution System. Although not explicitly covered in the review process, the Generation Facility shall be designed to meet all of the applicable requirements in Appendix I of Rule 14H.

Purpose:

HAWAIIAN ELECTRIC COMPANY, INC.

Docket No. 2014-0192, D&O No. 33791 dated July 11, 2016. Transmittal Letter Dated July 18, 2016.

The technical review process determines the following:

- 1) If a Generating Facility qualifies for Simplified Interconnection,
- 2) If a Generating Facility can be made to qualify for interconnection by performing a Supplemental Review that will be able to determine additional requirements, if any,
- If an IRS is required, the cost estimates and rough schedule for performing the IRS, or

Initial Technical Review Screens (Screens 1 through 11):

Screen 1: Does the proposed Generating Facility meet the Technical Specifications stated in Rule 22 (Customer Self-Supply), Appendix II, or Rule 27 (NEM+), Appendix III?

If Yes (Pass), continue to Screen 2, skip Screens 4, 5, 6, 8, and 9.

If No (Fail), continue to Screen 2.

Significance: 1) The Screen affords Expedited Review for qualified Customer Self-Supply Systems and NEM+ Systems.

Note 1: For a qualified Customer Self-Supply System or NEM+ System, the Company may install, at Company's expense, a bi-directional advanced meter.

Note 2: Any equipment for a qualified Customer Self-Supply System or NEM+ System shall be included by the Customer in the Facility Equipment List. Such equipment is intended to monitor and prevent an extended reverse power condition in which power flows from the Generating Facility to the Distribution System.

Note 3: The Company shall have the right to disconnect a Generating Facility without prior notice to the Customer pursuant to Rule 14H, Appendix I, Section 4.b in the event the Company determines that the Generating Facility is exporting power to the HAWAIIAN ELECTRIC COMPANY, INC.

Docket No. 2014-0192, D&O No. 35746 dated October 12, 2018. Transmittal Letter Dated October 22, 2018.

Distribution System for longer than the allowable limit as defined in Rule 22, Appendix II, or in a manner inconsistent with the limits defined in Rule 27, Appendix III, as applicable, and Customer shall pay for any and all costs incurred by the Company in enforcing this right.

Screen 2: If the proposed Generating Facility is single-phase and is to be interconnected on a center tap neutral of a 240 volt service, does it cause unacceptable imbalance between the two phases of the 240 volt service?

If Yes (Fail), continue to Screen 3; Initial Technical Review Screens 2 through 10 shall be completed in its entirety. If any of the Screens 2 through 10 are not passed, Company may perform a review of the failed Screen(s) during the Initial Technical Review period which may determine additional requirements needed to address the failure(s). Otherwise, Supplemental Review is required.

If No (Pass), continue to Screen 3.

Significance: Generating Facilities connected to a single-phase transformer with

120/240 V secondary voltage must be installed such that the aggregated
gross output is as balanced as practicable between the two phases of the

240 volt service.

Screen 3: Is the Point of Interconnection to a Network System?

If Yes (Fail), continue to Screen 4; Initial Technical Review Screens 2 through 10 shall be completed in its entirety. If any of the Screens 2 through 10 are not passed, Company may perform a review of the failed Screen(s) during the Initial Technical Review period which may determine additional requirements needed to address the failed Screen(s). Otherwise, Supplemental Review is required.

If No (Pass), continue to Screen 4.

HAWAIIAN ELECTRIC COMPANY, INC.

Significance: Special considerations must be given to Generating Facilities proposed to be installed on a Network System because of the design and operational aspects of network protectors. There are no such considerations for radial Distribution Systems.

Screen 4: If exporting power across the Point of Interconnection, can the power export cause a reversal of power flow, during normally expected circuit operating conditions, at any voltage regulation device that is not bi-directional?

If Yes (Fail), continue to Screen 5; Initial Technical Review Screens 2 through 10 shall be completed in its entirety. If any of the Screens 2 through 10 are not passed, Company may perform a review of the failed Screen(s) during the Initial Technical Review period which may determine additional requirements needed to address the failed Screen(s). Otherwise, Supplemental Review is required.

If No (Pass), continue to Screen 5.

Significance: If it can be assured that the Generating Facility will not export power, or if exported power will not cause a reversal of power flow at a voltage regulation device that is not designed to handle reverse power flow, the Company's Distribution System does not need to be studied for load-carrying capability or Generating Facility power flow effects on the Company's voltage regulators.

Note 1: This screen does not apply to a Generating Facility that passes Screen 1.

Note 2: The Technical System Size will be used in the evaluation of this Screen. However, if for example, the contribution of the energy storage system to the Technical System Size is limited by programming or by some other on-site limiting element, the reduced Technical System Size will be used in the evaluation of this Screen.

Screen 5: Is the aggregate Generating Facility capacity on the Line Section less than or equal to 15% of Line Section peak?

If Yes (Pass), continue to Screen 6.

If No (Fail), continue to Screen 6; Initial Technical Review Screens 2 through 10 shall be completed in its entirety. If any of the Screens 2 through 10 are not passed, Company may perform a review of the failed Screen(s) during the Initial Technical Review period which may determine additional requirements needed to address the failed Screen(s). Otherwise, Supplemental Review is required.

- Significance: 1) Low penetration of Generating Facility installations should have a minimal impact on the operation and load restoration efforts of the Company's Distribution System.
 - 2) The operating requirements for a high penetration of Generating Facilities may be different since the impact on the Company's Distribution System will no longer be minimal, therefore requiring additional study or controls.
- Note 1: This screen does not apply to a Generating Facility that passes Screen 1.
- Note 2: As applicable, the Technical System Size will be used in the evaluation of this Screen. However, if for example, the contribution of the energy storage system to the Technical System Size is limited by programming or by some other on-site limiting element, the reduced Technical System Size will be used in the evaluation of this Screen.

Screen 6: Is the voltage flicker and/or voltage drops associated with the Generating Facility within IEEE 519, IEEE 1453, or General Order 7 limits?

If Yes (Pass), continue to Screen 7.

If No (Fail), continue to Screen 7; Initial Technical Review Screens 2 through 10 shall be completed in its entirety. If any of the Screens 2 through 10 are not passed, Company may perform a review of the failed Screen(s) during the Initial Technical Review period which may determine additional requirements needed to address the failed Screen(s). Otherwise, Supplemental Review is required.

- Significance: 1) This screen addresses potential voltage fluctuation problems for other customers on the distribution circuit caused by Generating Facilities, especially those that start by motoring.
 - 2) When starting or connecting to the system, Generating Facilities should have minimal impact on the service voltage of other Customers.
 - 3) This screen addresses voltage flicker at the Point of Interconnection caused by the Generating Facility. Passing this screen does not relieve the Customer from ensuring that its Generating Facility complies with the flicker requirements of Rule 14H.

Note 1: This screen does not apply to a Generating Facility that passes Screen 1.

Note 2: As applicable, the Technical System Size will be used in the evaluation of this Screen. However, if for example, the contribution of the energy storage system to the Technical System Size is limited by programming or by some other on-site limiting element, the reduced Technical System Size will be used in the evaluation of this Screen.

Note 3: Energy Storage Systems that are designed or operated to charge from the utility grid will be considered in this Screen. The maximum charging kW of the energy storage system will be used in the evaluation of this Screen.

Screen 7: Do the maximum aggregated gross ratings for all the Generating Facilities connected to a secondary distribution transformer exceed the transformer, secondary conductor, fuse, or other equipment rating, absent the Applicant's generators?

If Yes (Fail), continue to Screen 8; Initial Technical Review Screens 2 through 10 shall be completed in its entirety. If any of the Screens 2 through 10 are not passed, Company may perform a review of the failed Screen(s) during the Initial Technical Review period which may determine additional requirements needed to address the failed Screen(s). Otherwise, Supplemental Review is required.

If No (Pass), continue to Screen 8.

Significance: This screen addresses potential Distribution Transformer or secondary conductor, fuse, and/or other equipment overloads and steady state voltage issues.

Note 1: For a Generating Facility that passes Screen 1, the Generating Facility will be considered to have a net-zero load impact to the calculations performed as part of this screen (i.e. customer load will be offset by the qualified Customer Self-Supply System or NEM+ system).

SHEET NO. 34D-15.1 Effective October 22, 2018

Note 2: As applicable, the Technical System Size will be used in the evaluation of this Screen. However, if for example, the contribution of the energy storage system to the Technical System Size is limited by programming or by some other on-site limiting element, the reduced Technical System Size will be used in the evaluation of this Screen.

Note 3: Energy Storage Systems that are designed or operated to charge from the utility grid will be considered in this Screen. The maximum charging kW of the energy storage system will be used in the evaluation of this Screen.

Screen 8: Is the Short Circuit Current Contribution Ratio within acceptable limits?

If Yes (Pass), continue to Screen 9.

If No (Fail), continue to Screen 9; Initial Technical Review Screens 2 through 10 shall be completed in its entirety. If any of the Screens 2 through 10 are not passed, Company may perform a review of the failed Screen(s) during the Initial Technical Review period which may determine additional requirements needed to address the failed Screen(s). Otherwise, Supplemental Review is required.

Significance: When measured at the primary side (high side) of a Dedicated Distribution

Transformer serving a Generating Facility, the sum of the short circuit

contribution ratios of all generating facilities connected to the secondary

side (low side) of that Distribution Transformer must be less than or equal

to 0.1 (10%). If the Generating Facility passes this screen it can be

expected that it will have no significant impact on the Company's

Distribution System's short circuit duty, fault detection sensitivity, relay

coordination or fuse-saving schemes.

Note 1: This screen does not apply to a Generating Facility that passes Screen 1.

Screen 9: Is the Short Circuit interrupting capability exceeded?

If Yes (Fail), continue to Screen 10; Initial Technical Review Screens 2 through 10 shall be completed in their entirety. If any of the Screens 2 through 10 are not passed, Company may perform a review of the failed Screen(s) during the Initial Technical Review period which may determine additional requirements needed to address the failed Screen(s). Otherwise, Supplemental Review is required.

If No (Pass), continue to Screen 10.

Significance: This Screen determines whether the Generating Facility, in aggregate with other generation on the distribution circuit, causes any distribution protective devices and equipment on the system to exceed 87.5% of their short circuit interrupting capability. If the Generating Facility passes this screen it can be expected that it will have no significant impact on the Customer's service equipment.

Note 1: This screen does not apply to a Generating Facility that passes Screen 1.

Screen 10: Is the Line Configuration Screen (see below) acceptable for Simplified Interconnection?

If Yes (Pass), continue to Screen 11.

If No (Fail), continue to Screen 11; Initial Technical Review Screens 2 through 10 shall be completed in its entirety. If any of the Screens 2 through 10 are not passed, Company may perform a review of the failed Screen(s) during the Initial Technical Review period which may determine additional requirements needed to address the failed Screen(s). Otherwise, Supplemental Review is required.

Line Configuration Screen: Identify primary distribution line configuration that will serve the Generating Facility. Based on the type of interconnection to be used for the Generating Facility, determine from the table below if the proposed Generating Facility passes the screen.

Table I

Primary Distribution Line Type Configuration	Type of Interconnection to be Made to Primary Distribution Line	Results/Criteria
Three-phase, three wire	Any type	Pass Screen
Three-phase, four wire	Single-phase, line-to-neutral	Pass Screen
Three-phase, four wire (For any line that has such a section OR mixed three wire and four wire)	All others	To pass, aggregate Generating Facility nameplate rating must be less than or equal to 10% of Line Section peak load

Significance: If the primary distribution line serving the Generating Facility is of a

"three-wire" configuration, or if the Generating Facility's distribution

transformer is single-phase and connected in a line-to-neutral

configuration, then there is no concern about overvoltages to the

Company's or other Customer's equipment caused by loss of system

HAWAIIAN ELECTRIC COMPANY, INC.

Docket No. 2014-0192, D&O No. 33791 dated July 11, 2016. Transmittal Letter Dated July 18, 2016.

neutral grounding during the operating time of the non-islanding protective function.

Note 1: This Screen does not apply to Generating Facilities with a Gross Rating of 10 kW or less.

Screen 11: Is the gross rating of the Generating Facility 100 kVA or less?

If Yes, the Generating Facility qualifies for Simplified Interconnection. Skip remaining screens.

If No, continue to Screen 12.

Significance: After meeting the requirements of the previous screens, this Generating

Facility will likely have a reduced impact on the Company's Distribution

System.

- a. Within fifteen (15) business days of the date the Customer's Interconnection
 Application is deemed complete, the Company will complete the Initial Technical Review and notify the Customer of the results.
- b. In the event that Supplemental Review would otherwise be triggered by a failure of Screens 1 through 11, Company may perform a review of the failed screen(s) during the Initial Technical Review period which may determine the additional requirements needed to address the failed screen(s) without the need for Supplemental Review. Otherwise, Supplemental Review is required. Some examples of requirements that may be available to address the failure of Screens 1 through 11 without the need for Supplemental Review include:
 - 1. Replace an overloaded Distribution Transformer with a larger transformer.
 - 2. Replace overloaded secondary conductors with larger conductor.

- Installation of an appropriately sized grounding transformer or other means to effectively ground a generator.
- 4. Transformer load tap changer upgrades.
- 5. Modified voltage and frequency ride-through settings.
- 6. Active and reactive power requirements.
- 7. Determine if phase balancing on the transformer is possible with minimal review.
- 8. If possible without further study, check if the Generating Facility will actually overstress equipment.
- c. If Company performs a review of failed Screen(s) 1 through 11 during the Initial Technical Review period and is able to determine the additional requirements needed to address the failed screen(s) and such additional requirements includes equipment, space and/or data at the Generating Facility location to be provided by the Customer for use in conjunction with the Company's Interconnection Facilities, then the Customer must also complete a Facility Equipment List, which will identify such equipment, space and/or data. The Facility Equipment List will be included as Exhibit B to any interconnection agreement entered between the Company and the Customer. If requested, the Company will provide assistance to the Customer to complete the Facility Equipment List. Company will provide a non-binding, good faith estimate of the Company's portion of the costs to perform the interconnection requirement that has been identified.
- d. The Initial Technical Review will result in the Company providing either: (a) if all of the Initial Technical Review Screens are passed, the Generating Facility qualifies for Simplified Interconnection, and an executable interconnection agreement for the Customer's

signature; or, (b) if one or more screens are not passed, notification whether Supplemental Review will be required and the results, in writing, of all Initial Technical Review screenings.

3. Supplemental Review

- a. If a Generating Facility has failed to meet one or more of the Initial Technical Review screens for Simplified Interconnection as proposed, and a review of the failed screen(s) cannot determine the requirement(s) to address the failure(s), then the Company will notify the Customer upon completing Initial Technical Review that a Supplemental Review as described in this section is needed.
- b. If Supplemental Review is required, the Customer shall notify the Company, in writing, to proceed with the Supplemental Review, or the Customer shall agree to withdraw the Interconnection Application. If the Customer does not notify the Company within fifteen (15) business days, the Interconnection Application shall be deemed to be withdrawn.
- c. The Supplemental Review shall be completed, absent any extraordinary circumstances, within twenty (20) business days of receipt of the Customer's approval, in writing, to proceed with the Supplemental Review. The Company, for good cause, without extraordinary circumstances, may modify the time limits to conduct the Supplemental Review and shall inform the Customer in writing of the need to modify the applicable time limits. The modified time limit shall be mutually agreed upon in writing between the Company and the Customer.
- d. The Supplemental Review will result in the Company providing either: (a)

 Simplified Interconnection, (b) interconnection requirements beyond those for a Simplified

 Interconnection, and a non-binding, good faith estimate of the Company's portion of the costs to

 perform the interconnection requirements identified by the Supplemental Review, or (c) a

determination that an IRS is required and a good faith cost estimate and schedule for the completion of the IRS, including an identification of the specific analysis and/or reviews that will be performed as part of the IRS.

- e. The Supplemental Review consists of Screens 12 and 13. If any of the Screens are not passed, a review of the failed Screen(s) within the timeframe established for Supplemental Review, or any modified time limits, may determine interconnection requirements or special design or operating requirements of the Generating Facility to address the failure(s), in which case an IRS may not be necessary. Otherwise, an IRS is required. Some examples of requirements that may be available to address the failure of Screens 12 and 13 without the need for an IRS include:
 - 1. Replacing a fixed capacitor bank with a switched capacitor bank.
 - 2. Adjustment of line regulation settings.
 - 3. Reconfiguration of the distribution circuit.
 - 4. A modified operating schedule of the Generating Facility.
 - Additional technical requirements of the Generating Facility equipment.

Supplemental Review Screens (Screens 12 – 13):

Screen 12 (Power Quality and Voltage Tests): In aggregate with existing generation on the Line Section,

- a) Can it be determined within the Supplemental Review that the voltage can be maintained in compliance with General Order 7?
- b) Can it be determined within the Supplemental Review that the voltage fluctuation is within acceptable limits as defined by IEEE 1453 or utility practice similar to IEEE 1453?
- c) Can it be determined within the Supplemental Review that the harmonic levels meet IEEE 519 limits at the point of interconnection?

If Yes to all (Pass), continue to Screen 13.

If No (Fail), a review of the failure may determine the additional requirements needed to address the failure; Continue to Screen 13.

Significance: Adverse voltages and undesirable interference may be experienced by other customers on the Company's Distribution System caused by operation of the Generating Facility.

Screen 13 (Safety and Reliability Tests): Does the location of the proposed Generating Facility or the aggregate generation capacity on the Line Section create impacts to safety or reliability that cannot be adequately addressed without an IRS?

If Yes (Pass), a review of the failure during the Supplemental Review may determine the requirements to address the failure, e.g. a Customer Self-Supply System that complies with the Technical Specifications stated in Company Rule 22 (Customer Self-Supply); otherwise, an IRS is required.

If No (Fail), Supplemental Review is complete.

Significance: In the safety and reliability test, there are several factors that may affect the nature and performance of an interconnection. These include, but are not limited to:

- 1. Generation energy source
- 2. Modes of synchronization
- 3. Unique system topology
- 4. Possible impacts to critical load customers
- 5. Possible safety impacts

The specific combination of these factors will determine if any system study requirements are needed. The following are some examples of the items that may be considered under this screen:

- 1. Does the Line Section have significant minimum loading levels dominated by a small number of customers (i.e., several large commercial customers)?
- 2. Is there an even or uneven distribution of loading along the feeder?
- 3. Is the proposed Generating Facility located in close proximity to the substation (i.e. <2.5 electrical line miles), and is the distribution line from the substation to the customer composed of large conductor/cable (i.e., 600A class cable)?
- 4. Does the Generating Facility incorporate a time delay function to prevent reconnection of the generator to the system until system voltage and frequency are within normal limits for a prescribed time?
- 5. Is operational flexibility reduced by the proposed Generating Facility, such that transfer of the Line Section(s) of the Generating Facility to a neighboring distribution circuit/substation may trigger overloads or voltage issues?
- 6. Does the Generating Facility utilize certified anti-islanding functions and equipment?
- f. The Supplemental Review shall be completed within twenty (20) business days of completion of Initial Technical Review.

e. If the Supplemental Review results in interconnection requirements beyond those for a Simplified Interconnection, the Customer must also complete a Facility Equipment List, which will identify equipment, space and/or data at the Generating Facility location to be provided by the Customer for use in conjunction with the Company's Interconnection Facilities. The Facility Equipment List will be included as an Exhibit to any interconnection agreement entered between the Company and the Customer. If requested, the Company will provide assistance to the Customer to complete the Facility Equipment List.

4. Interconnection Requirements Study ("IRS")

If the Supplemental Review process fails to determine interconnection requirements, then an IRS shall be performed as follows:

- a. If an IRS is necessary, the Company will provide the Customer with a good faith cost estimate and schedule for the completion of the IRS including an identification of the specific analysis and/or reviews that will be performed as part of the IRS. A cost estimate and schedule for the analyses will be provided to the Customer before the overall study is started. This generally would be done when the Company responds to the Customer with the findings of the Supplemental Review.
- b. If an IRS is required, the Customer shall agree to pay the cost estimate for the IRS provided by the Company, or the Customer shall withdraw its Interconnection Application. If the Customer does not agree to perform an IRS or agree to pay the cost estimate for the IRS within fifteen (15) business days, the Interconnection Application shall be deemed to be withdrawn. Customers with existing Generating Facilities already operating in parallel with the Company's system on March 21, 2003, will not be charged for any IRS.

- c. The scope and cost of the IRS will depend on the complexity of the Company's Distribution System to which the Generating Facility is requesting to interconnect, which must be modeled, and the degree to which the Generating Facility will affect the Company's system. Examples of the analyses and/or reviews that fall within an IRS include: (1) Feeder Load Flow; (2) Dynamic Stability Analysis; (3) Transient Overvoltage; and (4) Short Circuit and Relay Coordination.
- d. The Company may perform the analyses included in the IRS. The Company may also contract the analyses or parts of the analyses to an outside consultant specializing in such analyses for complex situations, or in situations where the Company does not have available resources to conduct the analyses in a time frame mutually agreeable to both the Company and the Customer.
- e. The Company shall complete or have a consultant complete the IRS within one hundred fifty (150) calendar days of the Customer's payment of the IRS. The Company, for good cause, without extraordinary circumstances, may modify the time limits to conduct the IRS and shall inform the Customer in writing of the need to modify the applicable time limit. The modified time limit shall be mutually agreed upon in writing between the Company and the Customer. The Company, shall provide a written letter to the Customer to explain all delays in completing the IRS beyond the completion schedule of one hundred fifty (150) calendar days.
- f. The Customer and Company may agree (to be documented in writing) to have the IRS performed by a qualified third-party consultant, or by a qualified employee, contractor, or agent of the Customer at the Customer's sole cost so long as the employee, consultant, contractor, or agent meets the following qualifications: (1) experience and familiarity with electric utility system modeling, feeder load flow analyses, dynamic stability analyses, transient

overvoltage analyses, and short circuit and relay coordination; (2) knowledge of electric utility system operation, transmission and distribution system planning and protection, and distributed generation interconnection issues; and (3) knowledge of the unique characteristics and needs of small, non-interconnected island electric grids and the unique challenges and operational requirements of such systems. In addition, the scope of work of the third-party consultant's study shall be mutually agreeable to both the Company and the Customer. Elements of the study scope of work may include items such as: (1) Feeder Load Flow; (2) Dynamic Stability Analysis; (3) Transient Overvoltage; and (4) Short Circuit and Relay Coordination. All study recommendations by the Customer's consultant shall be reviewed and approved by the Company.

- g. The Company may consolidate more than one Generating Facility in an IRS if the Generating Facilities are on the same Distribution System feeder that is the subject of the IRS, provided that the Customers consent to consolidation and the sharing of technical information between them. Parties to a consolidated IRS shall pay study and upgrade costs on a pro rata basis as agreed by the parties that desire to share the costs for the IRS. The cost may be prorated based upon the expected annual electricity output of the respective facilities or the capacity of the Generating Facility.
- h. The IRS may identify the need for Company Interconnection Facilities required to facilitate interconnection of the Generating Facility. The Customer will be responsible for the cost of any Company Interconnection Facilities associated with the interconnection of its Generating Facility. An identification of the Company Interconnection Facilities and an estimated cost of the Company Interconnection Facilities shall be listed in Exhibit C (Interconnection Facilities Owned by the Company) to the interconnection agreement entered

REVISED SHEET NO. 34D-26 Effective August 18, 2016

between the Company and the Customer. The Customer will be responsible for the cost of any Company Interconnection Facilities associated with the interconnection of its Generating Facility.

i. If the Company determines that there are benefits to the utility system due to the Company Interconnection Facilities, a credit reflecting these benefits shall be provided to the Customer, subject to Commission approval. For example, if there is a planned Distribution System addition that may be deferred or displaced due to the addition of the Company Interconnection Facilities associated with interconnection of a Generating Facility, the dollar

value of the deferral or displacement would be determined and proposed to be credited to the Customer (subject to Hawaii Public Utility Commission's approval) as a line item in Exhibit C to the interconnection agreement (Interconnection Facilities Owned by the Company), Section 2 (Customer Payment to Company for Company Interconnection Facilities, Review of Facility, and Review of Verification Testing). The calculation of the benefits to the utility system will be examined on a case-by-case basis taking into account what Distribution System addition(s) would have been deferred or displaced by the Company Interconnection Facilities that resulted from the interconnection of a Generation Facility. The Company would then calculate a dollar value of the deferral or displacement, and propose to credit the Customer for that deferral or displacement value. The Company shall file a letter providing the Commission with sufficient information to document the proposed credit to be provided to the Customer for said deferral or displacement value. The proposed deferral or displacement value would not be credited to the Customer until the Commission approves such credit.

5. Insurance Coverage

a. In accordance with Commission Decision and Order No. 22248, Docket No. 03-0371, the Company will not impose a standardized insurance requirement for distributed generation projects. However, the Customer is obligated to carry adequate insurance in forms and amounts that are commercially reasonable for each particular situation. The Customer bears responsibility for determining its insurance requirements. Prior to execution of the standard interconnection agreement, the Customer shall disclose if it will be self-insured (and if so its means and capability to self-insure) or if it will obtain an insurance policy (and if so in what forms and amounts). The Customer shall provide evidence of such insurance, including insurer's acknowledgement that coverage applies with respect to the standard interconnection agreement,

by providing certificates of insurance to the Company prior to any parallel interconnection, or, if insurance is being modified, within 30 days of any change.

b. As general guidance, the Company recommends consideration of a commercial general liability policy, covering bodily injury and property damage. The Company also recommends that coverage amounts be considered relative to the nameplate rating of the generator, with higher amounts of coverage for larger generators. Additionally, the Company recommends consideration of the following insurance provisions: (1) naming the Company, its directors, officers, agents, and employees as additional insureds; (2) inclusion of contractual liability coverage for written contracts and agreements including the standard interconnection agreement; (3) inclusion of provisions stating that the insurance will respond to claims or suits by additional insureds against the Customer or any other insured thereunder; and (4) inclusion of provisions that the insurance is primary with respect to the Customer and the Company. The adequacy of the coverage afforded by the insurance should be reviewed by the Customer from time to time, and if it appears in such review that risk exposures require an increase in the coverages and/or limits of this insurance, the Customer should make such increase to that extent.

6. Resolution of Disputes

a. If there is a dispute between the Customer and the Company as to whether an IRS is required, or as to the scope and cost of the study, then the Company generally would use the following procedures: (1) the Company's Contact Person would inform the Customer of the reasons for and scope of the study required; (2) if the Customer disagrees with the conclusion, then the Customer would meet with representatives from the Company to discuss the matter; (3) if the Customer continues to disagree with the conclusion, then the Customer would write to the Company's Contact Person explaining the position of the Customer, and the Company's Contact

Person would respond in writing within fifteen (15) business days² (so that any dispute is reduced to writing); (4) if the parties continue to have a dispute, then authorized representatives from the Company and Customer (having full authority to settle the dispute) would meet in Hawaii (or by telephone conference) with the meeting to be scheduled within fifteen (15) business days of a written request and attempt in good faith to resolve the dispute; and (5) if the parties continue to have a dispute, then the parties may engage in a form of alternative dispute resolution agreeable to both parties, or a party may request that the Commission resolve the matter by filing a written request with the Commission attaching the relevant information and correspondence, and serving the request on the other party and the Division of Consumer Advocacy of the Department of Commerce and Consumer Affairs of the State of Hawaii.

b. If there is a dispute as to the need for interconnection equipment, protective devices or control systems, then the Company generally would use the following procedures: (1) the Company's Contact Person would inform the Customer of the reasons for the interconnection equipment/protective devices/control systems; (2) if the Customer disagrees with the conclusion, then the Customer would meet with representatives from the Company to discuss the matter; (3) additional analyses may be conducted by the Company at the request of a Customer that questions the need for particular interconnection equipment/protective devices/control systems if the Customer pays for the analyses; (4) if the Customer continues to disagree with the conclusion, then the Customer would write to the Company's Contact Person explaining the position of the Customer, and the Company's Contact Person would respond in writing within

² The Company, for good cause, may modify the time limit. If the Company modifies the time limit, it shall notify the Customer in writing of the modification and the cause for the modification.

Superseding Sheet No. 34D-30 Effective August 18, 2016

fifteen (15) business days³ (so that any dispute is reduced to writing); (5) if the parties continue to have a dispute, then authorized representatives from the Company and Customer (having full authority to settle the dispute), would meet in Hawaii (or by telephone conference) with the meeting to be scheduled within fifteen (15) business days of a written request and attempt in good faith to resolve the dispute; and (6) if the parties continue to have a dispute, then the parties may engage in a form of alternative dispute resolution agreeable to both parties, or a party may request that the Commission resolve the matter by filing a written request with the Commission attaching the relevant information and correspondence, and serving the request on the other party and the Division of Consumer Advocacy of the Department of Commerce and Consumer Affairs of the State of Hawaii.

c. Customers are not required to exhaust the Company's dispute resolution procedures set forth above before proceeding under provisions applicable to informal or formal complaints or other provisions contained under the Rules of Practice and Procedure before the Public Utilities Commission, currently codified in Title 6, Chapter 61, Subchapter 5 of the Hawaii Administrative Rules, or any other applicable statutes, orders, rules, or regulations. If any such proceeding is initiated, the Customer shall notify the Company's Contact Person in writing that it does not desire to continue the Company's dispute resolution procedures.

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The Company, for good cause, may modify the time limit. If the Company modifies the time limit, it shall notify the Customer in writing of the modification and the cause for the modification.

7. <u>Modifications to Interconnection Applications</u>

- a. The provisions of this Section 7 shall apply only to those Customer Interconnection Applications for Generating Facilities under a Commission-approved DER program.
- b. With respect to each Interconnection Application submitted by the Customer, the Company shall allow the Customer to make modifications to each such Interconnection Application which increase the system capacity of the Customer's installed Generating Facility by up to 1 kW (100 Watts for Hawaii Electric Light) (when compared to the Customer's original Interconnection Application for such Generating Facility), provided that, in each case, the Customer submits a written request to the Company identifying a reasonable basis for such capacity expansion. For purposes of this Section 7.b, "reasonable basis" may include, without limitation: changes to the Company's qualified equipment list, switching contractors, non-availability of original equipment (and/or availability of better equipment), roof alterations or changes in shading, improved analysis of home electricity use and the evolving equipment requirements of third-party system financing or leasing companies.

- c. Any 1 kW increase permitted under this Section 7 shall be measured against the lowest or initial conditional approval system size on record for the Generating Facility, whichever is less.
- d. The 1 kW allowance provided pursuant to this Section 7 will not be applied against Commission-approved DER program caps after the applicable DER program capacity limit has been reached. However, the 1 kW allowance provided pursuant to this Section 7 will be applied against Commission-approved DER program caps while the applicable DER program is open and program capacity remains available. For tracking and monitoring purposes, the Company shall maintain a record of all Customers that have, since June 29, 2018, requested, and been approved for, an allowance up to 1 kW under Section 7.b above.
- e. With respect to each Interconnection Application submitted by the Customer participating in the Emergency Demand Response Program's Scheduled Dispatch Program, the Company shall allow the Customer to make modifications to each such Interconnection Application which increase the system capacity of the Customer's installed Generating Facility, provided that, in each case, the Customer submits the requisite documentation for participation in the Scheduled Dispatch Program. If an additions results in an additional post inverter alternating current generation capacity in excess of 5 kVA, such Generation Facility addition must be limited to no more than twice the capacity of the Battery Storage Facility.

- f. Any increase permitted under this Section 7 for the participation in the Scheduled Dispatch Program shall be measured against the lowest or initial conditional approval system size on record for the Generating Facility, whichever is less.
- g. The increase permitted under this Section 7 for the participation in the Scheduled Dispatch Program shall be measured as the post-inverter alternating current power, meaning the sum of the lower of the new generation direct current and the inverter alternating current nominal power ratings per inverter.
- h. The increase provided pursuant to this Section 7 for participation in the Scheduled Dispatch Program will not be applied against Commission-approved DER program caps. The Company will report on generation coming from the Scheduled Dispatch Program and will also provide a breakdown of which underlying DER tariffs the customers are participating in for purposes of the Scheduled Dispatch Program.

Revised Sheet No. 49.30-A Effective March 1, 2022

Rule No. 31

Emergency Demand Response Program

Rider: Scheduled Dispatch Program

AVAILABILITY FOR CUSTOMER BATTERY STORAGE-OPERATORS

Emergency Demand Response Program participation is available to new and existing Eligible Customer Battery Storage-Operators who own and operate a battery storage system charged from an Eligible Customer-Generator's owned or leased Generating Facility under the Company's Net Energy Metering ("NEM"), Customer Self-Supply, Customer Grid-Supply, Customer Grid-Supply Plus, Smart Export, or Standard Interconnection Agreement programs as described in Rule Nos. 18, 22, 23, 24, 25, and Rule 14H Appendix II, respectively ("Battery Storage Facility").

Revised Sheet No. 49.30-B Effective March 1, 2022

Rule No. 31

Emergency Demand Response Program

Rider: Scheduled Dispatch Program

A. AVAILABILITY

Scheduled Dispatch Program ("SDP" or "Battery Bonus Program") participation is available to new and existing Eligible Customer Battery Storage-Operators who own and operate a battery storage system charged from an Eligible Customer-Generator's owned or leased Generating Facility under the Company's Net Energy Metering, Customer Self-Supply, Customer Grid-Supply, Customer Grid-Supply Plus, Smart Export, or Standard Interconnection Agreement programs as described in Rule Nos. 18, 22, 23, 24, 25, and Rule 14H Appendix II, respectively ("Battery Storage Facility") where:

- 1. Eligible Customer Battery Storage-Operators execute the Scheduled Dispatch Program Agreement, provided as Appendix A of this Rule ("SDP Agreement"), memorializing their participation in the Battery Bonus Program and specifying the Committed Capacity (defined below) of their Battery Storage Facility,
- 2. Eligible Customer Battery Storage-Operators may add additional post inverter alternating current generation capacity¹ in coordination with their battery installation by submitting an amendment to the interconnection agreement governing the underlying Generating Facility ("SDP Amendment"); provided, however, that for additional post inverter alternating current generation capacity in excess of 5 kVA, such Generation Facility addition must be limited to no more than twice the capacity of the Battery Storage Facility.
- 3. If the Eligible Customer Battery Storage-Operator is not a party to the interconnection agreement governing the underlying Generating Facility (e.g., as the "Customer-Generator" or the "Owner/Operator"), the SDP Amendment shall make the Eligible Customer Battery Storage-Operator an additional party to such interconnection agreement with respect to the Battery Storage Facility and any generation capacity added to the underlying Generating Facility subject to the limitations of this Rule, and
- 4. Participation in the Battery Bonus Program does not inhibit Eligible Customer Battery Storage-Operators from fulfilling performance commitments of other grid services and demand response options, if dual participation is feasible.

B. ENROLLMENT

1. SDP will begin enrollment on July 1, 2021 and enrollment will be available until total enrolled SDP capacity reaches 50 megawatts ("MW") or until June 20, 2023, whichever comes first, unless otherwise ordered by the Commission.

¹ As referenced herein, "post inverter alternating current generation capacity" refers to the power measured at the alternating current output terminals of the inverter.

Rule No. 31

Emergency Demand Response Program Rider: Scheduled Dispatch Program

- 2. Enrollment in SDP is a ten-year commitment comprised of an initial phase ending for all participants on December 31, 2023 and a final phase commencing on January 1, 2024 and continuing for the remainder of the Eligible Customer Battery Storage-Operator's ten-year commitment. During the final phase of their ten-year commitment, each Eligible Customer Battery Storage-Operator will have the option to (a) continue operating their Battery Storage Facility under the SDP pursuant to this Rule or (b) transition to an alternative dispatch program upon meeting the applicable eligibility requirements for such alternative program.
- 3. The Eligible Customer Battery Storage-Operator's ten-year commitment under this Rule begins on the Battery Storage Facility's operational date, which is the first day (of the seven consecutive days) the Eligible Customer Battery Storage-Operator provides operational performance data of the Battery Storage Facility in connection with, and meeting the requirements of, the verification process outlined in section B.4 below.
- 4. To complete the enrollment process of executing the SDP Agreement, the Eligible Customer Battery Storage-Operator shall provide:
 - a. A complete validation package as required by Rule 14H,
 - b. A completed SDP Amendment, signed by the Eligible Customer Battery-Storage Operator (with the Company's countersignature of the SDP Amendment to be provided no later than 10 business days after the validation package has been approved by the Company),
 - c. A completed SDP Agreement, signed by the Eligible Customer Battery Storage-Operator (with the Company's countersignature of the SDP Agreement to be provided no later than 5 business days after all the requirements of this section B.4 are met),
 - d. Operational proof of start time and discharge of 2-hour duration of the Battery Storage Facility,
 - e. Federal tax form W-9 ("Form W-9"), and
 - f. Seven (7) consecutive days of operational performance data in five (5) minute intervals, if possible, or fifteen (15) minute intervals as necessary for the Company to verify the Battery Storage Facility discharges the Committed Capacity for the Dispatch Period in compliance with this Rule. The Company shall be required to complete such verification within 10 business days of the receipt of such performance data from Eligible Customer Battery Storage-Operator.
 - g. If no reasonable requests for additional data or concerns are expressed regarding the Committed Capacity or operation of the Battery Storage Facility as specified in section C of this Rule are communicated (in written or digital form) to the Eligible Customer Battery Storage-Operator by the Company within the 10 business day verification period described in section B.4.f, the Eligible Customer Battery Storage-Operator will be deemed verified as operating in compliance with this Rule.

Rule No. 31

Emergency Demand Response Program

Rider: Scheduled Dispatch Program

C. OPERATION

1. The Eligible Customer Battery Storage-Operator shall specify in its SDP Agreement the capacity level (kW) at which they commit to maintain the discharge level from their Battery Storage Facility ("Committed Capacity") for a duration of two consecutive hours each day ("Dispatch Period"). The Dispatch Period will be specified by the Company at the time of enrollment and may be revised by the Company upon written notice to the Eligible Customer Battery Storage-Operator; provided that the Eligible Customer Battery Storage-Operator shall have six months from the date of such written notice to implement such revision.

Revised Sheet No. 49.30-D Effective March 1, 2022

Rule No. 31

Emergency Demand Response Program Rider: Scheduled Dispatch Program

- 2. Energy discharged during the Dispatch Period from the Battery Storage Facility may either serve onsite load or be exported to the grid. The Eligible Customer Battery Storage-Operator shall be required to manage their Battery Storage Facility to automatically prioritize battery charging during periods of substantial solar panel insolation in order to most reliably serve the two-hour battery discharge commitment as scheduled by the Company.
- 3. Notwithstanding any other provision specified in the underlying Generating Facility's governing program tariff or in the interconnection agreement to which the Eligible Customer Battery Storage-Operator is a party (or is made a party as provided under this Rule), as applicable, energy exported to the grid from the Battery Storage Facility for the Battery Bonus Program during the Dispatch Period is permitted and, if applicable, compensated in accordance with the underlying Generating Facility's governing program tariff.
 - a. For the first three (3) years of Battery Bonus Program participation, non-NEM customers will be compensated a fixed monthly export credit.
 - b. Fixed monthly export credit = (the sum of the Non-Fuel Energy Charges and all per-kWh charges, adjustments, and surcharges applicable to the customer's rate schedule using February 2022 rates, adjustments, and surcharges (\$/kWh) non-NEM DER tariff export rate (\$/kWh)) x Committed Capacity (kW) x 70% x 2 hours x 30 days. For this calculation the customer's rate schedule is the customer's rate schedule on the SDP Agreement execution date.
 - c. Fixed monthly export credits cannot be applied to the minimum charge and cannot be applied to any non-bypassable charges. Fixed monthly export credits will be tracked for a twelve billing month period from the time of the start of the Battery Bonus Plus contract to the twelfth bill following the start of the Battery Bonus Plus Contract and for each twelve billing month period thereafter. Fixed monthly export credits that are not applied to a customer's bill may be applied to the customer's subsequent bill within the same twelve billing month period described above. Coincident with the twelfth bill following the start of the Battery Bonus Plus contract and each twelve month period thereafter, any fixed monthly export credits that are not applied will be forfeited.

Rule No. 31

Emergency Demand Response Program

Rider: Scheduled Dispatch Program

- d. After the first year, Company reserves the right to adjust the 70% factor in the fixed monthly export credit equation upon delivery of supported documentation to justify a different rate.
- e. Participants participating in Grid Service Purchase Agreement and not Battery Bonus Program are also eligible to receive this 3-year fixed monthly export credit.
- 4. In the event that solar insolation is insufficient to allow the Battery Storage Facility to meet the SDP requirement of providing the Committed Capacity for the Dispatch Period, the Eligible Customer Battery Storage-Operator will still be deemed to be in compliance with such requirement, provided the Battery Storage Facility is paired with a Generating Facility with a ratio of at least 1 kW of generation for every 2 kWh of Committed Capacity, as identified in the SDP Agreement.
- 5. All participating systems shall have Volt-Watt activation for the term of the project and meet current Advanced Inverter setting requirements.
- 6. Eligible Customer Battery Storage-Operator shall use the default ramp rate of equipment for the Committed Capacity during the Dispatch Period. Deviations from the default ramp rate may be required in certain circumstances where the default ramp rate may pose adverse impacts to grid power quality. The Company will notify the Eligible Customer Battery Storage-Operator of any such deviation when the Dispatch Period is specified or revised as described in Section C.1.

D. COMPENSATION

 Participation in the Battery Bonus Program shall be compensated by a one-time incentive payment ("Incentive Payment") based on the Battery Storage Facility's demonstrated Committed Capacity for the Dispatch Period in accordance with this Rule. The Incentive Payment shall be determined as of the SDP Amendment approval date pursuant to the table below:

Total SDP Committed Capacity MW	Incentive Payment Rate
First 15 MW	\$850/kW of Committed Capacity
Next 15 MW	\$750/kW of Committed Capacity
Next 20 MW (not to exceed 50 MW in total)	\$500/kW of Committed Capacity

Revised Sheet No. 49.30-E Effective March 1, 2022

Rule No. 31

Emergency Demand Response Program Rider: Scheduled Dispatch Program

- 2. The Eligible Customer Battery Storage-Operator must demonstrate compliance as described section B.3 with this Rule prior to receiving the Incentive Payment.
- 3. The Incentive Payment will be paid in full within 30 days of the SDP Agreement execution date. Payments shall be made directly to the owner of the Battery Storage Facility as identified in the SDP Agreement.
- 4. If the Eligible Customer Battery Storage-Operator does not operationalize its conditionally approved Battery Storage Facility by December 31, 2023, the Company will void the conditional approval to install and therefore will not owe the Eligible Customer Battery Storage-Operator any Incentive Payment.
- 5. Eligible Customer Battery Storage-Operators, as an additional incentive reflected on their utility bill, will receive a monthly peak capacity incentive (\$5/kW x Committed Capacity) ("Monthly Peak Capacity Payment") for 10-year period from enrollment.

E. FAILURE TO PERFORM

If the Company identifies concerns or issues relating to the Battery Storage Facility's performance, including, without limitation, potential non-compliance with this Rule pertaining to the discharge of Committed Capacity for the Discharge Period, the Company may conduct a performance audit to monitor and document conditions.

- 1. The Company shall provide the Eligible Customer Battery Storage-Operator written or digital notice at least seven (7) days in advance of any performance audit.
- 2. Eligible Customer Battery Storage-Operators are required to provide five (5) minute interval data, if possible, or fifteen (15) minute interval data as necessary to verify operation of Battery Storage Facility as specified in section C of this Rule within 5 business days of request from Company.
- 3. If the Battery Storage Facility fails to perform in compliance with this Rule, the Company will provide to the Eligible Customer Battery Storage-Operator a written notice of Failure to Perform, which will include documentation explaining the noncompliance of operation. The Eligible Customer Battery Storage-Operator will have 30 days from the date of such notice of Failure to Perform to cure the noncompliance.
- 4. If the non-compliance persists beyond the 30-day cure period, the Eligible Customer Battery Storage-Operator (recipient of the one-time Incentive Payment, Monthly Peak Capacity Payment and Monthly fixed export credit (as applicable)) will not receive the monthly payments and may be charged up to \$150 monthly until either the non-compliance is rectified or the Company has recovered the full prorated Incentive Payment amount.

Revised Sheet No. 49.30-F Effective March 1, 2022

Rule No. 31

Emergency Demand Response Program

Rider: Scheduled Dispatch Program

5. If the non-compliance continues for a duration of 12 months, the Company will automatically terminate the customer, and will seek a repayment of the Incentive Payment amount, prorated from the commencement of noncompliance date. If the Eligible Customer Battery Storage-Operator's repayment of such prorated amount is not promptly made in a single lump sum payment, the Eligible Customer Battery Storage-Operator's repayment of such prorated amount shall be made in 12 equal monthly installments to the Company.

F. TERMINATION

- 1. Notwithstanding their ten-year commitment under this Rule, the Eligible Customer Battery Storage-Operator may terminate, or a new account holder may assume, their SDP Agreement with written or digital notice provided 60 days prior to date of termination or assumption.
- 2. If termination occurs prior to the completion of the ten-year commitment, the Eligible Customer Battery Storage-Operator must remove the Battery Storage Facility, including associated solar panels, or transfer the same to an available DER Tariff through an amendment. Such Battery Storage Facility must remain non-operational until such time as it is removed or transferred to an alternative tariff.
- 3. If termination occurs prior to completion of the ten-year commitment, the Eligible Customer Battery Storage-Operator shall return a prorated portion of the Incentive Payment received. The prorated portion shall be based on the remaining portion of the ten-year commitment, calculated from the date of termination as a fraction of the Eligible Customer Battery Storage-Operator's ten-year commitment.
- 4. The Company will bill the prorated amount to the Eligible Customer Battery Storage-Operator. If the Eligible Customer Battery Storage-Operator's return of such prorated amount is not promptly made in a single lump sum payment, the Eligible Customer Battery Storage-Operator's return of such prorated amount shall be made in twelve equal monthly installments. The Company will not charge interest on a payment if final payment is made within one year of date of termination. Eligible Customer Battery Storage-Operators that are not direct customers must pay prorated amount in full. If the Eligible Customer Battery Storage-Operator decides to terminate their SDP Agreement during a non-compliance period, the non-compliance charges imposed pursuant to section E.5 and paid by the Eligible Customer Battery Storage-Operator will be applied towards the prorated Incentive Amount required to be returned by the Eligible Customer Battery Storage-Operator.

Rule No. 31

Emergency Demand Response Program

Rider: Scheduled Dispatch Program

G. METERING AND BILLING

- The Company will supply, install, own, and maintain all necessary meters and associated equipment utilized for billing, energy purchase, and performance auditing. The meters will be tested and read in accordance with the rules of the Commission and the Company.
- 2. Energy exported to the grid from the Battery Storage Facility will be compensated at applicable Energy Credit Rates for the Eligible Customer Battery Storage-Operator, as specified in the underlying Generating Facility's governing program tariff.
- 3. All rates, terms, and conditions from the applicable rate schedule will apply, as modified by the applicable program tariff, if applicable.

Revised Sheet No. 49.31-A Effective March 1, 2022

APPENDIX A

BATTERY BONUS PROGRAM AGREEMENT

This Scheduled Dispatch Program or Battery Bonus Program Agreement ("Agreement") is made by and between: Hawaiian Electric Company, Inc. ("Company") and _____("Customer Battery Storage-Operator") and is made, effective and binding as of ("Effective Date"). The Company and the Customer Battery Storage-Operator may each be referred to individually as a "Party" and collectively as the "Parties." WHEREAS, Company is an operating electric public utility subject to the Hawaii Public Utilities Law, Hawaii Revised Statutes, Chapter 269, and the rules and regulations of the Hawaii Public Utilities Commission ("Commission"); WHEREAS, the Customer Battery Storage-Operator qualifies as an "Eligible Customer Battery Storage-Operator," as defined in the Company's Emergency Demand Response Program tariff and its associated Scheduled Dispatch Program Rider ("SDP Tariff"); WHEREAS, the Customer Battery Storage-Operator intends to own and operate a battery storage system charged from an Eligible Customer-Generator's owned or leased Generating Facility governed by the Underlying Agreement, defined below, pursuant to the requirements of the Scheduled Dispatch Program ("Battery Storage Facility"): WHEREAS, the underlying Generating Facility that will charge the Battery Storage Facility is governed by an interconnection agreement with the Company dated ("Underlying Agreement") under the Company's Net Energy Metering ("NEM"), Customer Self-Supply, Customer Grid-Supply, Customer Grid-Supply Plus, Smart Export, or Standard Interconnection Agreement programs as described in Rule Nos. 18, 22, 23, 24, 25, and Rule 14H Appendix II, respectively; WHEREAS, the Customer Battery Storage-Operator is, or shall be made, a party to the Underlying Agreement for purposes of its participation in the Scheduled Dispatch Program; and WHEREAS, this Agreement is contingent upon and supplements the Underlying Agreement which, as may be amended, shall continue in full force and effect notwithstanding the Customer Battery Storage-Operator's participation in the Company's Scheduled Dispatch Program pursuant to this Agreement;

HAWAIIAN ELECTRIC COMPANY, INC.
Docket No. 2019-0323, Decision and Order No. 38196 filed January 25, 2022. Transmittal Letter Dated February 4, 2022.

Company and the Customer Battery Storage-Operator hereby agree as follows:

NOW, THEREFORE, in consideration of the premises and the respective promises herein, the

- 1. <u>Notice and Disclaimer Regarding Future Rate and Tariff Modifications.</u> This Agreement shall, at all times, be subject to modification by the Commission as said Commission may, from time to time, direct in the exercise of its jurisdiction. Without limiting the foregoing, Customer Battery Storage-Operator expressly acknowledges the following:
 - The Emergency Demand Response Program and its associated Scheduled Dispatch Program are subject to modification by the Hawaii Public Utilities Commission ("Commission").
 - Your Agreement and the Battery Storage Facility shall be subject to any future
 modifications ordered by the Commission. Such modifications may positively or
 negatively impact any potential savings in your electricity bill that were
 calculated by you or presented to you to support your decision to buy or lease a
 Battery Storage Facility and may otherwise change the value of your Agreement
 and Battery Storage Facility. You agree to pay for any costs related to such
 Commission ordered modifications.

BY SIGNING BELOW, YOU ACKNOWLEDGE THAT YOU HAVE READ, UNDERSTAND AND AGREE TO THE ABOVE NOTICE AND DISCLAIMER. FURTHER, BY SIGNING BELOW, YOU CONFIRM YOUR UNDERSTANDING THAT ANY POTENTIAL SAVINGS IN YOUR ELECTRICITY BILL THAT WERE CALCULATED BY YOU OR PRESENTED TO YOU TO SUPPORT YOUR DECISION TO BUY OR LEASE A BATTERY STORAGE FACILITY MAY CHANGE.

2. <u>Effectiveness of Agreement.</u> This Agreement shall not be effective until approved and executed by each Party, i.e., upon the Effective Date. Customer Battery Storage-Operator shall not operate the Battery Storage Facility prior to approval and execution of this Agreement by the Company, except to the extent allowed for by the Underlying Agreement or to the extent necessary to obtain governmental and utility approvals. Until this Agreement is effective, no Party shall have any legal obligations that extend beyond the Underlying Agreement, arising hereunder, express or implied, and any actions taken by a Party in reliance on the terms of this Agreement prior to the Effective Date shall be at that Party's own risk.

- 3. <u>Underlying Interconnection Agreement.</u> Customer Battery Storage-Operator's Battery Storage Facility enrollment and participation under the Scheduled Dispatch Program is contingent upon current enrollment of the underlying Generating Facility in the Company's Net Energy Metering, Customer Self-Supply, Customer Grid-Supply, Customer Grid-Supply Plus, Smart Export, or Standard Interconnection Agreement programs as described in Rule Nos. 18, 22, 23, 24, 25, and execution and non-default of the Underlying Agreement. This Agreement shall supplement the Underlying Agreement which, as may be amended, shall continue in full force and effect notwithstanding the Customer Battery Storage-Operator's participation in the Company's Schedule Dispatch Program pursuant to this Agreement.
- 4. <u>SDP Tariff.</u> Unless otherwise provided herein, the terms and conditions governing Customer Battery Storage-Operator's participation in the Battery Bonus Program shall be as set forth in Company's SDP Tariff.
- 5. <u>Enrollment and Operation.</u> Customer Battery Storage-Operator hereby agrees to commit to the following capacity (kW) of maintained discharge from the Battery Storage Facility ("Committed Capacity") on a preset schedule for a daily duration of two hours.

Customer I	Battery	Storage-0	Operator's	Committed	Capacity:	kW
	,					

The daily two-hour period during which the Committed Capacity will be dispatched ("Dispatch Period") will be specified by the Company at the time of enrollment and may be revised by the Company with reasonable notice.

- a) Within 30 days of commencement of discharge of Committed Capacity, Customer Battery Storage-Operator must provide seven (7) consecutive days of operational performance data in five (5) minute intervals, if possible, or fifteen (15) minute intervals as necessary to verify the operation of the Battery Storage Facility in accordance with this Agreement. The Company shall complete such verification within 10 business days of the receipt of such performance data from Customer Battery Storage-Operator.
- b) If no reasonable requests for additional data or concerns are expressed regarding operation of the Battery Storage Facility as specified in this Agreement are communicated (in written or digital form) to the Customer Battery Storage-Operator by Company within 10 business day verification period, the Customer Battery Storage-Operator will be deemed verified as operating in compliance with this Agreement.
- c) Notwithstanding any other provision specified in the underlying program tariff in which the Customer Battery Storage-Operator participates or in the interconnection agreement to which the Customer Battery Storage-Operator is a party, as applicable, energy exported to the grid from the Battery Storage Facility during the Dispatch Period shall be permitted and, if applicable, compensated in accordance with the Customer Battery Storage-Operator's underlying program tariff.

- i. For the first three (3) years of Battery Bonus Program participation, non-NEM customers will be compensated a fixed monthly export credit.
- ii. Fixed monthly export credit = (retail rate as of February 2022 rate (\$/kWh) non-NEM DER tariff export rate (\$/kWh)) x Committed Capacity (kW) x 70% x 2 hours x 30 days
- iii. Fixed monthly export credit will be zeroed out at the end of the year.
- iv. After the first year, Company reserves the right to adjust the 70% factor in the fixed monthly export credit equation upon delivery of supported documentation to justify a different rate.
- d) Energy discharged during the Dispatch Period from the Battery Storage Facility may either serve onsite load or be exported to the grid. Customer Battery Storage-Operator enrolled in Scheduled Dispatch is required to manage their DER systems to automatically prioritize battery charging during periods of substantial solar panel insolation in order to most reliably serve the two-hour battery discharge commitment as scheduled by the Company.
- e) Customer Battery Storage-Operator shall use the default ramp rate of equipment for the Committed Capacity during the Dispatch Period. Deviations from the default ramp rate may be required in certain circumstances where the default ramp rate may pose adverse impacts to grid power quality. The Company will notify the Customer Battery Storage-Operator of any such deviation when the Dispatch Period is specified or revised.
- 6. Term and Termination. This Agreement shall continue for ten (10) years from the commencement of the discharge of Committed Capacity for the Dispatch Period in accordance with this Agreement. Customer Battery Storage-Operator may terminate this Agreement at any time with sixty (60) days written notice. If termination occurs prior to completion of its ten-year commitment, Customer Battery Storage-Operator shall return a prorated portion of the compensation received pursuant to the SDR Tariff. The prorated portion of the compensation shall be based on the remaining portion of the ten-year commitment, calculated from the date of termination as a fraction of the Customer Battery Storage-Operator's ten-year commitment. Customer Battery Storage-Operator may either pay such owed amount in full or make other arrangements with the Company prior to termination. The Company will not charge interest on a payment if final payment is made within one year of date of termination. Company may terminate this Agreement at any time if Customer Battery-Storage Operator fails to comply with any term of this Agreement, the Underlying Agreement, or if the Customer Battery-Storage Operator fails to be an Eligible Customer Battery-Storage Operator.
- 7. Failure to Perform. If the Company identifies concerns or issues relating to the Battery Storage Facility's performance, including, without limitation, potential non-compliance with this Rule pertaining to the discharge of Committed Capacity for the Discharge Period, the Company may conduct a performance audit to monitor and document conditions.

- a) The Company shall provide the Customer Battery Storage-Operator written or digital notice at least seven (7) days in advance of any performance audit.
- b) Customer Battery Storage-Operator shall be required to provide five (5) minute interval data, if possible, fifteen (15) minute intervals as necessary to verify operation of the Battery Storage Facility in accordance with this Agreement with five (5) business days of request from Company.

- c) If the Battery Storage Facility fails to perform in compliance with this Rule, the Company will provide to the Customer Battery Storage-Operator a written notice of Failure to Perform, which will include documentation explaining the non-compliance of operation.
- d) Customer Battery Storage-Operator will have 30 days from the date of such notice of Failure to Perform to cure the non-compliance.
- e) If the non-compliance persists beyond the 30-day cure period, Customer Battery Storage-Operator (recipient of the one-time Incentive Payment, Monthly Peak Capacity Payment and Monthly fixed export credit (as applicable)) will not receive the monthly payments and may be charged up to \$150 monthly until either the non-compliance is rectified or the Company has recovered the full prorated compensation paid to Customer Battery Storage-Operator pursuant to the SDR Tariff.
- 8. <u>Scope of Agreement.</u> The Parties understand and agree that this Agreement is contingent upon the Underlying Agreement and applies only to the operation of Customer Battery Storage-Operator's Battery Storage Facility as specified by the Scheduled Dispatch Program.
- 9. Metering. Within fifteen (15) days of execution of this Agreement, the Company will supply, own, and maintain all necessary meters and associated equipment utilized for billing and energy purchase. The meters will be tested and read in accordance with the rules of the Commission and the Company. The Customer Battery Storage-Operator at its expense, shall provide, install and maintain all conductors, service switches, fuses, meter sockets, meter instrument transformer housing and mountings, switchboard meter test buses, meter panels and similar devices required for service connection and meter installations on the Customer Battery Storage-Operator's premises in accordance with the Company's Rule 14H.
- 10. <u>Compensation.</u> The terms regarding compensation to the Customer Battery System-Operator for its participation in the Company's Scheduled Dispatch Program shall be as set forth in the SDR Tariff. If the battery system operator and owner of the battery facility are the same and has an account with Hawaiian Electric, that individual or entity must sign the Battery Bonus Program agreement.
- 11. <u>Data and Private Information.</u> Company access to personal data, including information for tax reporting purposes, data related to the Battery Storage Facility performance and usage, electrical utility account information, usage history, and meter data is required for enrollment under the Company's Scheduled Dispatch Program. All data access, use, and sharing is subject to the terms of Hawaiian Electric's Customer Information Privacy Policy (available at https://www.hawaiianelectric.com/privacy-notice/customer-information-privacy-policy) and applicable law.
 - a) By executing this Agreement, Customer Battery Storage-Operator approves and consents to provide data required for enrollment under Scheduled Dispatch Program.
 - b) Tax Identification Number ("TIN") must be provided to Company via secure transfer prior to the Company executing this Agreement.

12. <u>Indemnification</u>.

a) The Customer Battery Storage-Operator shall indemnify, defend and hold harmless the Company and its officers, directors, agents and employees, from and against all liabilities, damages, losses, fines, penalties, claims, demands, suits, costs and expenses (including reasonable attorney's fees and expenses) to or by third persons, including the Company's employees or subcontractors, for injury or death, or for injury to property, arising out of the actions or inactions of the Customer Battery Storage-Operator (or those of anyone under its control or on its behalf) with respect to its obligations under this Agreement, and/or arising out of the installation, operation and maintenance of the Battery Storage Facility, except to the extent that such injury, death or damage is attributable to the gross negligence or intentional act or omission of the Company or its officers, directors, agents or employees.

Provided, however, where the Customer Battery Storage-Operator is an agency of the United States, the following Section shall be applicable in place of Paragraph 12(a):

"The United States understands that it may be held liable for loss, damages expense and liability to third persons and injury to or death of persons or injury to property caused by the United States in its engineering design, construction ownership or operations of, or the making of replacements, additions betterment to, or by failure of, any of such party's works or facilities used in connection with this Agreement to the extent allowed by the Federal Tort Claims Act 28 U.S.C. § 2671 et seq. and the Agreement Disputes Act of 1978, 41 U.S.C. §§ 601-613.

Company shall be responsible for damages or injury caused by Company, Company's agents, officers, and employees in the course of their employment to the extent permitted by law."

Provided, however, where the Customer Battery Storage-Operator is an agency of the State of Hawaii (the "State"), the following Section shall be applicable in place of Paragraph 12(a):

"The State shall be responsible for damages or injury caused by the State's agents, officers, and employees in the course of their employment to the extent that the State's liability for such damage or injury has been determined by a court or otherwise agreed to by the State. The State shall pay for such damage and injury to the extent permitted by law. The State shall use reasonable good faith efforts to pursue any approvals from the Legislature and the Governor that may be required to obtain the funding necessary to enable the State to perform its obligations or cover its liabilities hereunder. The State shall not request Company to indemnify the State for, or hold the State harmless from, any claims for such damages or injury.

Company shall be responsible for damages or injury caused by Company, Company's agents, officers, and employees in the course of their employment to the extent that Company's liability for such damage or injury has been determined by a court or otherwise agreed to by Company, and Company shall pay for such damage and injury to the extent permitted by law. Company shall not request the State to indemnify Company for, or hold Company harmless from, any claims for such damages or injury."

- b) The Company shall indemnify, defend and hold harmless the Customer Battery Storage-Operator, and its officers, directors, agents and employees, from and against all liabilities, damages, losses, fines, penalties, claims, demands, suits, costs and expenses (including reasonable attorney's fees and expenses) to or by third persons, including the Customer Battery Storage-Operator's employees or subcontractors, for injury or death, or for injury to property, arising out of the actions or inactions of the Company (or those of anyone under its control or on its behalf) with respect to its obligations under this Agreement, except to the extent that such injury, death or damage is attributable to the gross negligence or intentional act or omission of the Customer Battery Storage-Operator or its officers, directors, agents or employees.
- c) Nothing in this Agreement shall create any duty to, any standard of care with reference to, or any liability to any person not a party to it.

- 13. <u>Limitation of Liability</u>. Neither by inspection, if any, or non-rejection, nor in any other way, does the Company give any warranty, express or implied, as to the adequacy, safety, or other characteristics of any structures, equipment, wires, appliances or devices owned, installed or maintained by the Customer Battery Storage-Operator, including without limitation the Battery Storage Facility and any structures, equipment, wires, appliances or devices appurtenant thereto.
- Force Majeure. For purposes of this Agreement, "Force Majeure Event" means any 14. event: (a) that is beyond the reasonable control of the affected Party; and (b) that the affected Party is unable to prevent or provide against by exercising reasonable diligence, including the following events or circumstances, but only to the extent they satisfy the preceding requirements: (a) acts of war, public disorder, insurrection or rebellion; floods, hurricanes, earthquakes, lighting, storms, and other natural calamities; explosions or fires; strikes, work stoppages, or labor disputes; embargoes; and sabotage. If a Force Majeure Event prevents a Party from fulfilling any obligations under this Agreement, such Party will promptly notify the other Parties in writing and will keep the other Parties informed on a continuing basis of the scope and duration of the Force Majeure Event. The affected Party will specify in reasonable detail the circumstances of the Force Majeure Event, its expected duration, and the steps that the affected Party is taking to mitigate the effects of the event on its performance. The affected Party will be entitled to suspend or modify its performance of obligations under this Agreement, other than the obligation to make payments then due or becoming due under this Agreement, but only to the extent that the effect of the Force Majeure Event cannot be mitigated by the use of reasonable efforts. The affected Party will use reasonable efforts to resume its performance as soon as possible.
- 15. Additional Information. By signing this Agreement, the Customer Battery Storage-Operator expressly agrees and authorizes Company to (1) request and obtain additional information from Customer Battery Storage-Operator relating to the Battery Storage Facility, and/or (2) make modifications to the Customer Battery Storage-Operator's Battery Storage Facility, at no cost to the Company, where reasonably necessary, to serve the Customer Battery Storage-Operator under this Agreement or to ensure reliability, safety of operation, and power quality of the Company's system.
- 16. Notices. Any notice required under this Agreement shall be in writing and mailed at any United States Post Office with postage prepaid and addressed to the Party, or personally delivered to the Party at the address identified on the last page of the Agreement. Changes in such designation may be made by notice similarly given. Notice sent by mail shall be deemed to have been given on the date of actual delivery or at the expiration of the fifth day after the date of mailing, whichever is earlier.

17. Miscellaneous.

- a) Governing Law and Regulatory Authority. This Agreement was executed in the State of Hawaii and must in all respects be interpreted, governed, and construed under the laws of the State of Hawaii. This Agreement is subject to, and the Parties' obligations hereunder include, operating in full compliance with all valid, applicable federal, state, and local laws or ordinances, and all applicable rules, regulations, orders of, and tariffs approved by, duly constituted regulatory authorities having jurisdiction.
- b) Amendment, Modifications, or Waiver. This Agreement may not be altered or modified by any of the Parties, except by an instrument in writing executed by each of them. None of the provisions of this Agreement shall be considered waived by a Party unless such waiver is given in writing. The failure of a Party to insist in any one or more instances upon strict performance of any of the provisions of this Agreement or to take advantage of any of its rights hereunder shall not be construed as a waiver of any such provisions or the relinquishment of any such rights for the future, but the same shall continue and remain in full force and effect. This Agreement contains the entire agreement and understanding between the Parties, their agents, and employees as to the subject matter of this Agreement. Each Party also represents that in entering into this Agreement, it has not relied on any promise, inducement, representation, warranty, agreement or other statement not set forth in this Agreement.
- c) <u>Assignment.</u> This Agreement may not be assigned by any Party without the prior written consent of the other Parties. Such consent shall not be unreasonably withheld.
- d) <u>Binding Effect.</u> This Agreement shall be binding upon and inure to the benefit of the Parties hereto and their respective successors, legal representatives, and permitted assigns.
- e) Relationship of Parties. Nothing in this Agreement shall be deemed to constitute any Party hereto as partner, agent or representative of the other Parties or to create any fiduciary relationship between the Parties.
- f) <u>Limitations</u>. Nothing in this Agreement shall limit the Company's ability to exercise its rights or expand or diminish its liability with respect to the provision of electrical service pursuant to the Company's tariffs as filed with the Commission, or the Commission's Standards for Electric Utility Service in the State of Hawaii, which currently are included in the Commission's General Order Number 7, as either may be amended from time to time.

g) Execution of Agreement; Multiple Counterparts. This Agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument binding all Parties notwithstanding that all of the Parties are not signatories to the same counterparts. Signatures may be provided in original ("wet") form or by other means intended to preserve the original graphic and pictorial appearance of the signature, such as a photocopy. A copy of a Party's signature shall be considered an "original" signature for purposes of this Agreement.

Revised Sheet No. 49.31-K Effective March 1, 2022

IN WITNESS WHEREOF, the Parties hereto have caused two originals of this Agreement to be executed by their duly authorized representatives. This Agreement is effective as of the date first set forth above.

CUSTOMER BATTERY STORAGE-OPERATOR

	Date		
_	To be completed by Company Date		
To be completed by Company			
_ To be completed by Company			
	To be completed by Company		

MAILING ADDRESS

Hawaiian Electric Company
Distributed Energy Resources Division
P.O. Box 2750 (AT10-SE)
Honolulu, HI 96840
HAWAIIAN ELECTRIC COMPANY, INC.
Order No.

Hawaiian Electric Company, Inc.

Exhibit 3
Hawaiian Electric's Proposed Revisions to
Rule No. 14H Appendix III
Rule No. 31
and
Rule No. 31 Appendix A

(Blacklined Version)

APPENDIX III Interconnection Process Overview

The purpose of this Appendix III is to provide a general overview of the process and procedures for interconnecting a Generating Facility that will operate in parallel with the Company's Distribution System. The general technical guidelines to facilitate the interconnection and parallel operation of Generating Facilities with the Company's Distribution System are set forth in Appendix I of this Rule 14H. For Generating Facilities subject to Rule 14H, if there is a conflict between the technical specifications set forth in Appendix I with any technical specifications set forth elsewhere in the Company's tariffs, the specifications of Appendix I shall prevail. Capitalized terms used in this Appendix III are defined in Appendix I of this Rule 14H.

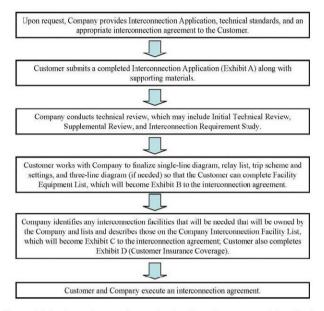
1. Steps in the Interconnection Process

- a. The interconnection process will be initiated when a Customer approaches or contacts the Company to request interconnection of a Generating Facility to the Company's Distribution System that will operate in parallel with the Company's Distribution System. The Company shall designate a centralized point of contact for applications to interconnect a Generating Facility to the Company's Distribution System.
- b. The following flowchart provides, for illustrative purposes, the major steps in the interconnection process:

HAWAIIAN ELECTRIC COMPANY, INC.

Docket No. 2014-0192, D&O No. 33791 dated July 11, 2016. Transmittal Letter Dated July 18, 2016.

STEPS IN THE INTERCONNECTION PROCESS



c. The activities in each step shown in the flowchart are explained below:

Step 1: Within five (5) business days of receiving a Customer's request to interconnect a Generating Facility to the Company's Distribution System, the Company will provide the Customer with: (a) the Distributed Generating Facility Interconnection Standards Technical Requirements (Rule 14H Appendix I); (b) an appropriate interconnection agreement depending on the Customer's intent to export or participate in a wholesale power sale arrangement; and (c) this Interconnection Process Overview (Rule 14H Appendix III).

Step 2: The Company's interconnection review begins when a Customer submits a completed Exhibit A to Appendix II, Appendix II-A or Appendix II-B attached hereto or other Company-approved application for interconnection of a Generating Facility governed by

HAWAIIAN ELECTRIC COMPANY, INC.

Docket No. 2014-0192, D&O No. 33791 dated July 11, 2016. Transmittal Letter Dated July 18, 2016.

SHEET NO. 34D-2.1 Effective October 22, 2018

Rule 14H ("Interconnection Application").

For those Customers that apply to add a non-exporting system to their existing exporting system, such Customers shall provide the following to the Company, to the extent required to complete the Interconnection Application or otherwise requested by the Company in connection with its interconnection review: the Program System Size and Technical System Size of the existing (exporting) Generating Facility and the new Generating Facility (non-export) addition.

HAWAIIAN ELECTRIC COMPANY, INC.

Docket No. 2014-0192, D&O No. 35746 dated October 12, 2018.

Transmittal Letter Dated October 22, 2018.

Along with the Customer's Interconnection Application, the Customer must also provide the design drawings, operating manuals, manufacturer's brochures/instruction manual and technical specifications, manufacturer's test reports, bill of material, protection and synchronizing relays and settings, and protection, synchronizing, and control schemes for the Generating Facility to the Company for its review. The Company shall have the right to specify the protection and synchronizing relays and settings, and protection, synchronizing and control schemes, consistent with the technical requirements of Appendix I, that affect the reliability and safety of operation and power quality of the Company's system with which the Generating Facility seeks to interconnect ("Facility Protection Devices/Schemes"). The Company shall maintain the confidentiality of information the Customer deems confidential, unless and until a final, non-appealable Commission decision determines that disclosure is necessary to protect the public or as otherwise determined by the Commission.

Within fifteen (15) business days of the receipt of an Interconnection Application and supporting material, or such other period as is mutually agreed upon in writing by the Company and the Customer, the Company shall review the Customer's Interconnection Application and supporting material and provide written notification of its general completeness, or alternatively, incompleteness. If an Interconnection Application is deemed incomplete, the Company shall specify in a written notice the additional information that is required. The completeness determination cycle will be repeated as necessary until sufficient information is submitted by the Customer to enable the Company to review the Interconnection Application.

Step 3: Within fifteen (15) business days of the date the Customer's Interconnection Application and supporting materials are deemed complete, the Company will complete an

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Initial Technical Review of the Interconnection Application. The Company shall make a determination as to whether a Generating Facility is interconnected, designed to operate in parallel or designed to function with momentary parallel operation with the Company's electric system during the Initial Technical Review.¹ The Initial Technical Review will result in the Company providing either:

(1) Expedited Review for Self-Supply and NEM+ Systems:

Interconnection Applications for Customer Self-Supply Systems under Company's Rule 22 (Customer Self- Supply) and NEM+ Systems comprised of more than a standalone energy storage system, e.g., battery storage, under Company's Rule 27 (NEM+) that will not export power across the Point of Interconnection except as allowed under Rule 22, Rule 27 and as required under this Rule 14H, shall qualify for expedited interconnection.

(2) Simplified Interconnection or Supplemental Review: For all Interconnection Applications, other than Appendix II-B, if all of the Initial Technical Review Screens are passed, the Generating Facility qualifies for Simplified Interconnection, and an executable interconnection agreement for the Customer's signature; or, if one or more screens are not passed, notification that Supplemental Review will be required and the results, in writing, of all Initial Technical Review screenings.

If Supplemental Review is required, the Customer shall notify the Company, in writing, to proceed with the Supplemental Review, or the Customer shall agree to withdraw its

Interconnection Application. In order to expedite the process, Customer may pre-acknowledge

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¹ Momentary-Parallel Systems: For Appendix II-B Applications, i.e. Application For Non-Export Distributed Generation Facilities (Momentary-Parallel Operation), if the Generating Facility is designed to operate in parallel with the Distribution System, for a duration of less than 0.1 seconds, i.e. "momentary parallel operation", then the Generating Facility qualifies for expedited interconnection. Registration shall satisfy the Customer's notice requirements set forth in Tariff Rule 3B (Change In Customer's Equipment Or Operations) and is required for purposes of determining potential load that the Company may be required to serve. Such systems shall be deemed to be "non-exporting" and shall not require reverse power protection. However, the Company may install at Company's expense, a bi-directional advanced meter. Company shall have the right to disconnect a Generating Facility without prior notice to the Customer pursuant to Rule 14H, Section 4.b, in the event the Company determines that the Generating Facility is operating in parallel with the Distribution System in excess of momentary parallel operation and Customer shall pay for any and all costs incurred by the Company in enforcing this right.

and agree to proceed to Supplemental Review, if necessary, at the time an Interconnection Application is submitted to the Company for review. Within twenty (20) business days of notification by the Customer that it would like to move forward with Supplemental Review, the Company shall complete a Supplemental Review. The Supplemental Review will result in the Company providing either: (a) Simplified Interconnection (b) interconnection requirements beyond those for a Simplified Interconnection, and a non-binding, good faith estimate of the Company's portion of the costs to perform the interconnection requirements identified by the Supplemental Review, or (c) a determination that an Interconnection Requirements Study (IRS) is required, and a good faith cost estimate and schedule for the completion of the IRS including an identification of the specific analysis and/or reviews that will be performed as part of the IRS.

If an IRS is required, the Customer shall agree to pay the cost estimate for the IRS provided by the Company, or the Customer shall withdraw its Interconnection Application. The Company shall complete the IRS within one hundred fifty (150) calendar days of the Customer's agreement to move forward with the IRS and payment of the IRS cost is received. The completion of the IRS shall include the Company's proposal to the Customer of the following:

(a) interconnection requirements and a non-binding, good faith estimate of the Company's portion of the costs to perform the interconnection requirements; and (b) protection and synchronizing relays and settings, protection, synchronizing and control schemes, and any other equipment and/or performance requirements necessary to meet the IRS requirements.

Final results of all technical screenings, Supplemental Review, and IRS will be provided in writing to the Customer.

Step 4: Based on the results of the Initial Technical Review, or Supplemental Review (if needed), or IRS (if needed), the Customer and Company will work together to finalize the single-

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line diagram, relay list, trip scheme and settings, and three-line diagram, which is required in the circumstances set forth in the Interconnection Application. After finalization of the single-line diagram, relay list, trip scheme and settings, and three-line diagram (if required), the Customer will make any revisions deemed necessary to the Interconnection Application and resubmit the Interconnection Application to the Company. Resubmission will not impact the Customer's interconnection position. The Customer must also complete a Facility Equipment List, which will identify equipment, space and/or data at the Generating Facility location that must be provided by the Customer for use in conjunction with the Company's Interconnection Facilities. The Facility Equipment List will be included as Exhibit B to an interconnection agreement entered between the Company and the Customer. If requested, the Company will provide assistance to the Customer to complete the Facility Equipment List.

Step 5: Within fifteen (15) business days of the completion of all activities specified in Step 4 above, or within such other period as is mutually agreed upon in writing by the Company and the Customer, the Company will complete an identification of Interconnection Facilities that are necessary to complete the interconnection and that will be owned by the Company. A list and description of the Company's Interconnection Facilities will be included as Exhibit C to the interconnection agreement entered between the Company and the Customer. The Company and Customer shall mutually agree in writing to a schedule by which the Interconnection Facilities will be constructed and a determination of when the Customer's Generating Facility shall be connected to the Company's Distribution System. The Interconnection Facilities are project-specific, and the time to complete the facilities will depend on the complexity of the facilities required. Consistent with Section 5 of this Appendix III, the Customer shall maintain insurance coverage or be self-insured against risks arising under the interconnection agreement. The

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Customer Insurance Coverage will be included as Exhibit D to any interconnection agreement entered between the Company and the Customer.

Step 6: Within five (5) business days of the completion of all activities specified in Step 5 above, the Company will provide the Customer with an executable interconnection agreement, which must be executed prior to the interconnection and parallel operation of the Customer's Generating Facility. If requested by the Customer, the interconnection agreement may be signed by the Customer and a third party that is the owner and/or operator of the Generating Facility.

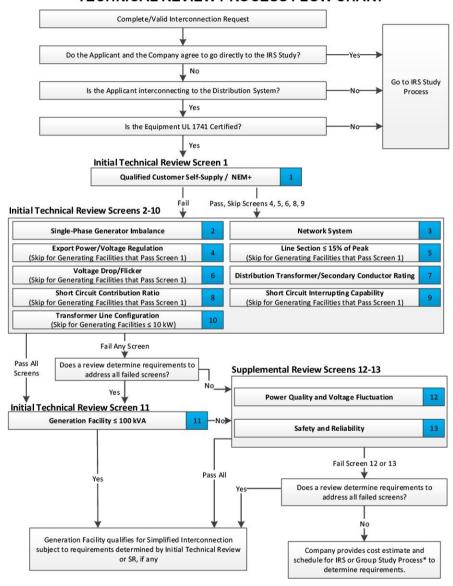
The Company will provide a fully executed interconnection agreement to the Customer:

(a) within fifteen (15) business days of receipt of Customer's executed interconnection agreement if all applicable City and/or County permits required for the Generating Facility have been closed and posted, and all Customer documentation required as a part of the interconnection agreement have been received; or (b) within fifteen (15) business days following the date upon which all applicable City and/or County permits required for the Generating Facility have been closed and posted, and all Customer documentation required as a part of the interconnection agreement have been received.

2. Overview of Technical Review Process

a. Process Flowchart: The following flowchart provides, for illustrative purposes,
 the major steps in the technical review process:

TECHNICAL REVIEW PROCESS FLOW CHART



^{* &}quot;Group Study Process" may include a consolidated IRS or a proactive utility determination of interconnection requirements covering multiple Generating Facilities.

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Explanation of Screens: The following provides an explanation of the screens
 used in the technical review process:

Introduction:

The technical review process allows for the timely approval for the interconnection of Generating Facilities to the Company's Distribution System that will operate in parallel with the Company's Distribution System. The technical review process includes a screening to determine if a Generating Facility qualifies for Simplified Interconnection, or if Supplemental Review is needed to determine requirements, if any, beyond those of a Simplified Interconnection, or if an Interconnection Requirement Study (IRS) is needed to determine interconnection requirements. The Company will perform an Initial Technical Review unless (1) Applicant and the Company mutually agree to proceed directly to an IRS, (2) an Applicant is not connecting to the Company's Distribution System, or (3) an Applicant is interconnecting with equipment that is not UL 1741 certified, provided that the Company may permit uncertified equipment to proceed without an IRS if the equipment will provide benefits related to safety, reliability or power quality. If (1), (2), or (3) applies, the Applicant will proceed directly to an IRS.

Note: Failure to pass any screen of the Initial Technical Review process or Supplemental Review process means only that additional review is required to determine whether additional requirements, if any, are needed before the Generating Facility can be approved for interconnection with the Company's Distribution System. Although not explicitly covered in the review process, the Generation Facility shall be designed to meet all of the applicable requirements in Appendix I of Rule 14H.

Purpose:

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The technical review process determines the following:

- 1) If a Generating Facility qualifies for Simplified Interconnection,
- If a Generating Facility can be made to qualify for interconnection by performing a Supplemental Review that will be able to determine additional requirements, if any,
- If an IRS is required, the cost estimates and rough schedule for performing the IRS, or

Initial Technical Review Screens (Screens 1 through 11):

Screen 1: Does the proposed Generating Facility meet the Technical Specifications stated in Rule 22 (Customer Self-Supply), Appendix II, or Rule 27 (NEM+), Appendix III?

If Yes (Pass), continue to Screen 2, skip Screens 4, 5, 6, 8, and 9.

If No (Fail), continue to Screen 2.

<u>Significance</u>: 1) The Screen affords Expedited Review for qualified Customer Self-Supply Systems and NEM+ Systems.

<u>Note 1</u>: For a qualified Customer Self-Supply System or NEM+ System, the Company may install, at Company's expense, a bi-directional advanced meter.

<u>Note 2</u>: Any equipment for a qualified Customer Self-Supply System or NEM+ System shall be included by the Customer in the Facility Equipment List. Such equipment is intended to monitor and prevent an extended reverse power condition in which power flows from the Generating Facility to the Distribution System.

Note 3: The Company shall have the right to disconnect a Generating Facility without prior notice to the Customer pursuant to Rule 14H, Appendix I, Section 4.b in the event the Company determines that the Generating Facility is exporting power to the HAWAIIAN ELECTRIC COMPANY, INC.

Distribution System for longer than the allowable limit as defined in Rule 22, Appendix II, or in a manner inconsistent with the limits defined in Rule 27, Appendix III, as applicable, and Customer shall pay for any and all costs incurred by the Company in enforcing this right.

Screen 2: If the proposed Generating Facility is single-phase and is to be interconnected on a center tap neutral of a 240 volt service, does it cause unacceptable imbalance between the two phases of the 240 volt service?

If Yes (Fail), continue to Screen 3; Initial Technical Review Screens 2 through 10 shall be completed in its entirety. If any of the Screens 2 through 10 are not passed, Company may perform a review of the failed Screen(s) during the Initial Technical Review period which may determine additional requirements needed to address the failure(s). Otherwise, Supplemental Review is required.

If No (Pass), continue to Screen 3.

Significance: Generating Facilities connected to a single-phase transformer with 120/240 V secondary voltage must be installed such that the aggregated gross output is as balanced as practicable between the two phases of the 240 volt service.

Screen 3: Is the Point of Interconnection to a Network System?

If Yes (Fail), continue to Screen 4; Initial Technical Review Screens 2 through 10 shall be completed in its entirety. If any of the Screens 2 through 10 are not passed, Company may perform a review of the failed Screen(s) during the Initial Technical Review period which may determine additional requirements needed to address the failed Screen(s). Otherwise, Supplemental Review is required.

If No (Pass), continue to Screen 4.

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Significance: Special considerations must be given to Generating Facilities proposed to be installed on a Network System because of the design and operational aspects of network protectors. There are no such considerations for radial Distribution Systems.

Screen 4: If exporting power across the Point of Interconnection, can the power export cause a reversal of power flow, during normally expected circuit operating conditions, at any voltage regulation device that is not bi-directional?

If Yes (Fail), continue to Screen 5; Initial Technical Review Screens 2 through 10 shall be completed in its entirety. If any of the Screens 2 through 10 are not passed, Company may perform a review of the failed Screen(s) during the Initial Technical Review period which may determine additional requirements needed to address the failed Screen(s). Otherwise, Supplemental Review is required.

If No (Pass), continue to Screen 5.

Significance: If it can be assured that the Generating Facility will not export power, or if exported power will not cause a reversal of power flow at a voltage regulation device that is not designed to handle reverse power flow, the Company's Distribution System does not need to be studied for load-carrying capability or Generating Facility power flow effects on the Company's voltage regulators.

Note 1: This screen does not apply to a Generating Facility that passes Screen 1.

<u>Note 2</u>: The Technical System Size will be used in the evaluation of this Screen. However, if for example, the contribution of the energy storage system to the Technical System Size is limited by programming or by some other on-site limiting element, the reduced Technical System Size will be used in the evaluation of this Screen.

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Screen 5: Is the aggregate Generating Facility capacity on the Line Section less than or equal to 15% of Line Section peak?

If Yes (Pass), continue to Screen 6.

If No (Fail), continue to Screen 6; Initial Technical Review Screens 2 through 10 shall be completed in its entirety. If any of the Screens 2 through 10 are not passed, Company may perform a review of the failed Screen(s) during the Initial Technical Review period which may determine additional requirements needed to address the failed Screen(s). Otherwise, Supplemental Review is required.

<u>Significance</u>: 1) Low penetration of Generating Facility installations should have a minimal impact on the operation and load restoration efforts of the Company's Distribution System.

> 2) The operating requirements for a high penetration of Generating Facilities may be different since the impact on the Company's Distribution System will no longer be minimal, therefore requiring additional study or controls.

Note 1: This screen does not apply to a Generating Facility that passes Screen 1.

Note 2: As applicable, the Technical System Size will be used in the evaluation of this Screen. However, if for example, the contribution of the energy storage system to the Technical System Size is limited by programming or by some other on-site limiting element, the reduced Technical System Size will be used in the evaluation of this Screen.

HAWAIIAN ELECTRIC COMPANY, INC.

Screen 6: Is the voltage flicker and/or voltage drops associated with the Generating Facility within IEEE 519, IEEE 1453, or General Order 7 limits?

If Yes (Pass), continue to Screen 7.

If No (Fail), continue to Screen 7; Initial Technical Review Screens 2 through 10 shall be completed in its entirety. If any of the Screens 2 through 10 are not passed, Company may perform a review of the failed Screen(s) during the Initial Technical Review period which may determine additional requirements needed to address the failed Screen(s). Otherwise, Supplemental Review is required.

<u>Significance</u>: 1) This screen addresses potential voltage fluctuation problems for other customers on the distribution circuit caused by Generating Facilities, especially those that start by motoring.

- When starting or connecting to the system, Generating Facilities should have minimal impact on the service voltage of other Customers.
- 3) This screen addresses voltage flicker at the Point of Interconnection caused by the Generating Facility. Passing this screen does not relieve the Customer from ensuring that its Generating Facility complies with the flicker requirements of Rule 14H.

Note 1: This screen does not apply to a Generating Facility that passes Screen 1.

Note 2: As applicable, the Technical System Size will be used in the evaluation of this

Screen. However, if for example, the contribution of the energy storage system to the Technical System Size is limited by programming or by some other on-site limiting element, the reduced Technical System Size will be used in the evaluation of this Screen.

HAWAIIAN ELECTRIC COMPANY, INC.

<u>Note 3</u>: Energy Storage Systems that are designed or operated to charge from the utility grid will be considered in this Screen. The maximum charging kW of the energy storage system will be used in the evaluation of this Screen.

Screen 7: Do the maximum aggregated gross ratings for all the Generating Facilities connected to a secondary distribution transformer exceed the transformer, secondary conductor, fuse, or other equipment rating, absent the Applicant's generators?

If Yes (Fail), continue to Screen 8; Initial Technical Review Screens 2 through 10 shall be completed in its entirety. If any of the Screens 2 through 10 are not passed, Company may perform a review of the failed Screen(s) during the Initial Technical Review period which may determine additional requirements needed to address the failed Screen(s). Otherwise, Supplemental Review is required.

If No (Pass), continue to Screen 8.

<u>Significance</u>: This screen addresses potential Distribution Transformer or secondary conductor, fuse, and/or other equipment overloads and steady state voltage issues.

Note 1: For a Generating Facility that passes Screen 1, the Generating Facility will be considered to have a net-zero load impact to the calculations performed as part of this screen (i.e. customer load will be offset by the qualified Customer Self-Supply System or NEM+ system).

HAWAIIAN ELECTRIC COMPANY, INC.

SHEET NO. 34D-15.1 Effective October 22, 2018

Note 2: As applicable, the Technical System Size will be used in the evaluation of this Screen. However, if for example, the contribution of the energy storage system to the Technical System Size is limited by programming or by some other on-site limiting element, the reduced Technical System Size will be used in the evaluation of this Screen.

<u>Note 3</u>: Energy Storage Systems that are designed or operated to charge from the utility grid will be considered in this Screen. The maximum charging kW of the energy storage system will be used in the evaluation of this Screen.

Screen 8: Is the Short Circuit Current Contribution Ratio within acceptable limits?

If Yes (Pass), continue to Screen 9.

If No (Fail), continue to Screen 9; Initial Technical Review Screens 2 through 10 shall be completed in its entirety. If any of the Screens 2 through 10 are not passed, Company may perform a review of the failed Screen(s) during the Initial Technical Review period which may determine additional requirements needed to address the failed Screen(s). Otherwise, Supplemental Review is required.

HAWAIIAN ELECTRIC COMPANY, INC.

SHEET NO. 34D-15.2 Effective October 22, 2018

Significance: When measured at the primary side (high side) of a Dedicated Distribution

Transformer serving a Generating Facility, the sum of the short circuit

contribution ratios of all generating facilities connected to the secondary

side (low side) of that Distribution Transformer must be less than or equal

to 0.1 (10%). If the Generating Facility passes this screen it can be

expected that it will have no significant impact on the Company's

Distribution System's short circuit duty, fault detection sensitivity, relay

coordination or fuse-saving schemes.

Note 1: This screen does not apply to a Generating Facility that passes Screen 1.

Screen 9: Is the Short Circuit interrupting capability exceeded?

If Yes (Fail), continue to Screen 10; Initial Technical Review Screens 2 through 10 shall be completed in their entirety. If any of the Screens 2 through 10 are not passed, Company may perform a review of the failed Screen(s) during the Initial Technical Review period which may determine additional requirements needed to address the failed Screen(s). Otherwise, Supplemental Review is required.

If No (Pass), continue to Screen 10.

Significance: This Screen determines whether the Generating Facility, in aggregate with other generation on the distribution circuit, causes any distribution protective devices and equipment on the system to exceed 87.5% of their short circuit interrupting capability. If the Generating Facility passes this screen it can be expected that it will have no significant impact on the Customer's service equipment.

Note 1: This screen does not apply to a Generating Facility that passes Screen 1.

HAWAIIAN ELECTRIC COMPANY, INC.

Screen 10: Is the Line Configuration Screen (see below) acceptable for Simplified Interconnection?

If Yes (Pass), continue to Screen 11.

If No (Fail), continue to Screen 11; Initial Technical Review Screens 2 through 10 shall be completed in its entirety. If any of the Screens 2 through 10 are not passed, Company may perform a review of the failed Screen(s) during the Initial Technical Review period which may determine additional requirements needed to address the failed Screen(s). Otherwise, Supplemental Review is required.

<u>Line Configuration Screen</u>: Identify primary distribution line configuration that will serve the Generating Facility. Based on the type of interconnection to be used for the Generating Facility, determine from the table below if the proposed Generating Facility passes the screen.

Table I

Primary Distribution Line Type Configuration	Type of Interconnection to be Made to Primary Distribution Line	Results/Criteria
Three-phase, three wire	Any type	Pass Screen
Three-phase, four wire	Single-phase, line-to-neutral	Pass Screen
Three-phase, four wire (For any line that has such a section OR mixed three wire and four wire)	All others	To pass, aggregate Generating Facility nameplate rating must be less than or equal to 10% of Line Section peak load

Significance: If the primary distribution line serving the Generating Facility is of a
"three-wire" configuration, or if the Generating Facility's distribution
transformer is single-phase and connected in a line-to-neutral
configuration, then there is no concern about overvoltages to the
Company's or other Customer's equipment caused by loss of system

HAWAIIAN ELECTRIC COMPANY, INC.

REVISED SHEET NO. 34D-17 Effective October 22, 2018

neutral grounding during the operating time of the non-islanding protective function.

Note 1: This Screen does not apply to Generating Facilities with a Gross Rating of 10 kW or less.

Screen 11: Is the gross rating of the Generating Facility 100 kVA or less?

If Yes, the Generating Facility qualifies for Simplified Interconnection. Skip remaining screens.

If No, continue to Screen 12.

<u>Significance</u>: After meeting the requirements of the previous screens, this Generating Facility will likely have a reduced impact on the Company's Distribution System.

- a. Within fifteen (15) business days of the date the Customer's Interconnection
 Application is deemed complete, the Company will complete the Initial Technical Review and notify the Customer of the results.
- b. In the event that Supplemental Review would otherwise be triggered by a failure of Screens 1 through 11, Company may perform a review of the failed screen(s) during the Initial Technical Review period which may determine the additional requirements needed to address the failed screen(s) without the need for Supplemental Review. Otherwise, Supplemental Review is required. Some examples of requirements that may be available to address the failure of Screens 1 through 11 without the need for Supplemental Review include:
 - 1. Replace an overloaded Distribution Transformer with a larger transformer.
 - 2. Replace overloaded secondary conductors with larger conductor.

HAWAIIAN ELECTRIC COMPANY, INC.

- Installation of an appropriately sized grounding transformer or other means to effectively ground a generator.
- 4. Transformer load tap changer upgrades.
- 5. Modified voltage and frequency ride-through settings.
- Active and reactive power requirements.
- Determine if phase balancing on the transformer is possible with minimal review.
- If possible without further study, check if the Generating Facility will actually overstress equipment.
- c. If Company performs a review of failed Screen(s) 1 through 11 during the Initial Technical Review period and is able to determine the additional requirements needed to address the failed screen(s) and such additional requirements includes equipment, space and/or data at the Generating Facility location to be provided by the Customer for use in conjunction with the Company's Interconnection Facilities, then the Customer must also complete a Facility Equipment List, which will identify such equipment, space and/or data. The Facility Equipment List will be included as Exhibit B to any interconnection agreement entered between the Company and the Customer. If requested, the Company will provide assistance to the Customer to complete the Facility Equipment List. Company will provide a non-binding, good faith estimate of the Company's portion of the costs to perform the interconnection requirement that has been identified.
- d. The Initial Technical Review will result in the Company providing either: (a) if all of the Initial Technical Review Screens are passed, the Generating Facility qualifies for Simplified Interconnection, and an executable interconnection agreement for the Customer's

HAWAIIAN ELECTRIC COMPANY, INC.

signature; or, (b) if one or more screens are not passed, notification whether Supplemental Review will be required and the results, in writing, of all Initial Technical Review screenings.

3. Supplemental Review

- a. If a Generating Facility has failed to meet one or more of the Initial Technical Review screens for Simplified Interconnection as proposed, and a review of the failed screen(s) cannot determine the requirement(s) to address the failure(s), then the Company will notify the Customer upon completing Initial Technical Review that a Supplemental Review as described in this section is needed.
- b. If Supplemental Review is required, the Customer shall notify the Company, in writing, to proceed with the Supplemental Review, or the Customer shall agree to withdraw the Interconnection Application. If the Customer does not notify the Company within fifteen (15) business days, the Interconnection Application shall be deemed to be withdrawn.
- c. The Supplemental Review shall be completed, absent any extraordinary circumstances, within twenty (20) business days of receipt of the Customer's approval, in writing, to proceed with the Supplemental Review. The Company, for good cause, without extraordinary circumstances, may modify the time limits to conduct the Supplemental Review and shall inform the Customer in writing of the need to modify the applicable time limits. The modified time limit shall be mutually agreed upon in writing between the Company and the Customer.
- d. The Supplemental Review will result in the Company providing either: (a)
 Simplified Interconnection, (b) interconnection requirements beyond those for a Simplified
 Interconnection, and a non-binding, good faith estimate of the Company's portion of the costs to
 perform the interconnection requirements identified by the Supplemental Review, or (c) a

HAWAIIAN ELECTRIC COMPANY, INC.

determination that an IRS is required and a good faith cost estimate and schedule for the completion of the IRS, including an identification of the specific analysis and/or reviews that will be performed as part of the IRS.

- e. The Supplemental Review consists of Screens 12 and 13. If any of the Screens are not passed, a review of the failed Screen(s) within the timeframe established for Supplemental Review, or any modified time limits, may determine interconnection requirements or special design or operating requirements of the Generating Facility to address the failure(s), in which case an IRS may not be necessary. Otherwise, an IRS is required. Some examples of requirements that may be available to address the failure of Screens 12 and 13 without the need for an IRS include:
 - 1. Replacing a fixed capacitor bank with a switched capacitor bank.
 - 2. Adjustment of line regulation settings.
 - 3. Reconfiguration of the distribution circuit.
 - A modified operating schedule of the Generating Facility.
 - 5. Additional technical requirements of the Generating Facility equipment.

Supplemental Review Screens (Screens 12 – 13):

Screen 12 (Power Quality and Voltage Tests): In aggregate with existing generation on the Line Section,

- a) Can it be determined within the Supplemental Review that the voltage can be maintained in compliance with General Order 7?
- b) Can it be determined within the Supplemental Review that the voltage fluctuation is within acceptable limits as defined by IEEE 1453 or utility practice similar to IEEE 1453?
- c) Can it be determined within the Supplemental Review that the harmonic levels meet IEEE 519 limits at the point of interconnection?

HAWAIIAN ELECTRIC COMPANY, INC.

If Yes to all (Pass), continue to Screen 13.

If No (Fail), a review of the failure may determine the additional requirements needed to address the failure: Continue to Screen 13.

<u>Significance</u>: Adverse voltages and undesirable interference may be experienced by other customers on the Company's Distribution System caused by operation of the Generating Facility.

Screen 13 (Safety and Reliability Tests): Does the location of the proposed Generating Facility or the aggregate generation capacity on the Line Section create impacts to safety or reliability that cannot be adequately addressed without an IRS?

If Yes (Pass), a review of the failure during the Supplemental Review may determine the requirements to address the failure, e.g. a Customer Self-Supply System that complies with the Technical Specifications stated in Company Rule 22 (Customer Self-Supply); otherwise, an IRS is required.

If No (Fail), Supplemental Review is complete.

<u>Significance</u>: In the safety and reliability test, there are several factors that may affect the nature and performance of an interconnection. These include, but are not limited to:

- 1. Generation energy source
- 2. Modes of synchronization
- 3. Unique system topology
- 4. Possible impacts to critical load customers
- 5. Possible safety impacts

HAWAIIAN ELECTRIC COMPANY, INC.

The specific combination of these factors will determine if any system study requirements are needed. The following are some examples of the items that may be considered under this screen:

- Does the Line Section have significant minimum loading levels dominated by a small number of customers (i.e., several large commercial customers)?
- 2. Is there an even or uneven distribution of loading along the feeder?
- 3. Is the proposed Generating Facility located in close proximity to the substation (i.e. <2.5 electrical line miles), and is the distribution line from the substation to the customer composed of large conductor/cable (i.e., 600A class cable)?
- 4. Does the Generating Facility incorporate a time delay function to prevent reconnection of the generator to the system until system voltage and frequency are within normal limits for a prescribed time?
- 5. Is operational flexibility reduced by the proposed Generating Facility, such that transfer of the Line Section(s) of the Generating Facility to a neighboring distribution circuit/substation may trigger overloads or voltage issues?
- 6. Does the Generating Facility utilize certified anti-islanding functions and equipment?
- f. The Supplemental Review shall be completed within twenty (20) business days of completion of Initial Technical Review.

HAWAIIAN ELECTRIC COMPANY, INC.

e. If the Supplemental Review results in interconnection requirements beyond those for a Simplified Interconnection, the Customer must also complete a Facility Equipment List, which will identify equipment, space and/or data at the Generating Facility location to be provided by the Customer for use in conjunction with the Company's Interconnection Facilities. The Facility Equipment List will be included as an Exhibit to any interconnection agreement entered between the Company and the Customer. If requested, the Company will provide assistance to the Customer to complete the Facility Equipment List.

4. Interconnection Requirements Study ("IRS")

If the Supplemental Review process fails to determine interconnection requirements, then an IRS shall be performed as follows:

- a. If an IRS is necessary, the Company will provide the Customer with a good faith cost estimate and schedule for the completion of the IRS including an identification of the specific analysis and/or reviews that will be performed as part of the IRS. A cost estimate and schedule for the analyses will be provided to the Customer before the overall study is started. This generally would be done when the Company responds to the Customer with the findings of the Supplemental Review.
- b. If an IRS is required, the Customer shall agree to pay the cost estimate for the IRS provided by the Company, or the Customer shall withdraw its Interconnection Application. If the Customer does not agree to perform an IRS or agree to pay the cost estimate for the IRS within fifteen (15) business days, the Interconnection Application shall be deemed to be withdrawn. Customers with existing Generating Facilities already operating in parallel with the Company's system on March 21, 2003, will not be charged for any IRS.

HAWAIIAN ELECTRIC COMPANY, INC.

Superseding Revised Sheet No. 34D-24 Effective October 21, 2015 REVISED SHEET NO. 34D-24 Effective August 18, 2016

- c. The scope and cost of the IRS will depend on the complexity of the Company's Distribution System to which the Generating Facility is requesting to interconnect, which must be modeled, and the degree to which the Generating Facility will affect the Company's system. Examples of the analyses and/or reviews that fall within an IRS include: (1) Feeder Load Flow; (2) Dynamic Stability Analysis; (3) Transient Overvoltage; and (4) Short Circuit and Relay Coordination.
- d. The Company may perform the analyses included in the IRS. The Company may also contract the analyses or parts of the analyses to an outside consultant specializing in such analyses for complex situations, or in situations where the Company does not have available resources to conduct the analyses in a time frame mutually agreeable to both the Company and the Customer.
- e. The Company shall complete or have a consultant complete the IRS within one hundred fifty (150) calendar days of the Customer's payment of the IRS. The Company, for good cause, without extraordinary circumstances, may modify the time limits to conduct the IRS and shall inform the Customer in writing of the need to modify the applicable time limit. The modified time limit shall be mutually agreed upon in writing between the Company and the Customer. The Company, shall provide a written letter to the Customer to explain all delays in completing the IRS beyond the completion schedule of one hundred fifty (150) calendar days.
- f. The Customer and Company may agree (to be documented in writing) to have the IRS performed by a qualified third-party consultant, or by a qualified employee, contractor, or agent of the Customer at the Customer's sole cost so long as the employee, consultant, contractor, or agent meets the following qualifications: (1) experience and familiarity with electric utility system modeling, feeder load flow analyses, dynamic stability analyses, transient

HAWAIIAN ELECTRIC COMPANY, INC.

Superseding Revised Sheet No. 34D-25 Effective October 21, 2015 REVISED SHEET NO. 34D-25 Effective August 18, 2016

overvoltage analyses, and short circuit and relay coordination; (2) knowledge of electric utility system operation, transmission and distribution system planning and protection, and distributed generation interconnection issues; and (3) knowledge of the unique characteristics and needs of small, non-interconnected island electric grids and the unique challenges and operational requirements of such systems. In addition, the scope of work of the third-party consultant's study shall be mutually agreeable to both the Company and the Customer. Elements of the study scope of work may include items such as: (1) Feeder Load Flow; (2) Dynamic Stability Analysis; (3) Transient Overvoltage; and (4) Short Circuit and Relay Coordination. All study recommendations by the Customer's consultant shall be reviewed and approved by the Company.

- g. The Company may consolidate more than one Generating Facility in an IRS if the Generating Facilities are on the same Distribution System feeder that is the subject of the IRS, provided that the Customers consent to consolidation and the sharing of technical information between them. Parties to a consolidated IRS shall pay study and upgrade costs on a pro rata basis as agreed by the parties that desire to share the costs for the IRS. The cost may be prorated based upon the expected annual electricity output of the respective facilities or the capacity of the Generating Facility.
- h. The IRS may identify the need for Company Interconnection Facilities required to facilitate interconnection of the Generating Facility. The Customer will be responsible for the cost of any Company Interconnection Facilities associated with the interconnection of its Generating Facility. An identification of the Company Interconnection Facilities and an estimated cost of the Company Interconnection Facilities shall be listed in Exhibit C (Interconnection Facilities Owned by the Company) to the interconnection agreement entered

HAWAIIAN ELECTRIC COMPANY, INC.

Superseding Revised Sheet No. 34D-26 Effective October 21, 2015 REVISED SHEET NO. 34D-26 Effective August 18, 2016

between the Company and the Customer. The Customer will be responsible for the cost of any Company Interconnection Facilities associated with the interconnection of its Generating Facility.

i. If the Company determines that there are benefits to the utility system due to the Company Interconnection Facilities, a credit reflecting these benefits shall be provided to the Customer, subject to Commission approval. For example, if there is a planned Distribution System addition that may be deferred or displaced due to the addition of the Company Interconnection Facilities associated with interconnection of a Generating Facility, the dollar

HAWAIIAN ELECTRIC COMPANY, INC.

value of the deferral or displacement would be determined and proposed to be credited to the Customer (subject to Hawaii Public Utility Commission's approval) as a line item in Exhibit C to the interconnection agreement (Interconnection Facilities Owned by the Company), Section 2 (Customer Payment to Company for Company Interconnection Facilities, Review of Facility, and Review of Verification Testing). The calculation of the benefits to the utility system will be examined on a case-by-case basis taking into account what Distribution System addition(s) would have been deferred or displaced by the Company Interconnection Facilities that resulted from the interconnection of a Generation Facility. The Company would then calculate a dollar value of the deferral or displacement, and propose to credit the Customer for that deferral or displacement value. The Company shall file a letter providing the Commission with sufficient information to document the proposed credit to be provided to the Customer for said deferral or displacement value. The proposed deferral or displacement value would not be credited to the Customer until the Commission approves such credit.

5. <u>Insurance Coverage</u>

a. In accordance with Commission Decision and Order No. 22248, Docket No. 03-0371, the Company will not impose a standardized insurance requirement for distributed generation projects. However, the Customer is obligated to carry adequate insurance in forms and amounts that are commercially reasonable for each particular situation. The Customer bears responsibility for determining its insurance requirements. Prior to execution of the standard interconnection agreement, the Customer shall disclose if it will be self-insured (and if so its means and capability to self-insure) or if it will obtain an insurance policy (and if so in what forms and amounts). The Customer shall provide evidence of such insurance, including insurer's acknowledgement that coverage applies with respect to the standard interconnection agreement,

HAWAIIAN ELECTRIC COMPANY, INC.

by providing certificates of insurance to the Company prior to any parallel interconnection, or, if insurance is being modified, within 30 days of any change.

b. As general guidance, the Company recommends consideration of a commercial general liability policy, covering bodily injury and property damage. The Company also recommends that coverage amounts be considered relative to the nameplate rating of the generator, with higher amounts of coverage for larger generators. Additionally, the Company recommends consideration of the following insurance provisions: (1) naming the Company, its directors, officers, agents, and employees as additional insureds; (2) inclusion of contractual liability coverage for written contracts and agreements including the standard interconnection agreement; (3) inclusion of provisions stating that the insurance will respond to claims or suits by additional insureds against the Customer or any other insured thereunder; and (4) inclusion of provisions that the insurance is primary with respect to the Customer and the Company. The adequacy of the coverage afforded by the insurance should be reviewed by the Customer from time to time, and if it appears in such review that risk exposures require an increase in the coverages and/or limits of this insurance, the Customer should make such increase to that extent.

6. Resolution of Disputes

a. If there is a dispute between the Customer and the Company as to whether an IRS is required, or as to the scope and cost of the study, then the Company generally would use the following procedures: (1) the Company's Contact Person would inform the Customer of the reasons for and scope of the study required; (2) if the Customer disagrees with the conclusion, then the Customer would meet with representatives from the Company to discuss the matter; (3) if the Customer continues to disagree with the conclusion, then the Customer would write to the Company's Contact Person explaining the position of the Customer, and the Company's Contact

HAWAIIAN ELECTRIC COMPANY, INC.

Person would respond in writing within fifteen (15) business days² (so that any dispute is reduced to writing); (4) if the parties continue to have a dispute, then authorized representatives from the Company and Customer (having full authority to settle the dispute) would meet in Hawaii (or by telephone conference) with the meeting to be scheduled within fifteen (15) business days of a written request and attempt in good faith to resolve the dispute; and (5) if the parties continue to have a dispute, then the parties may engage in a form of alternative dispute resolution agreeable to both parties, or a party may request that the Commission resolve the matter by filing a written request with the Commission attaching the relevant information and correspondence, and serving the request on the other party and the Division of Consumer Advocacy of the Department of Commerce and Consumer Affairs of the State of Hawaii.

b. If there is a dispute as to the need for interconnection equipment, protective devices or control systems, then the Company generally would use the following procedures: (1) the Company's Contact Person would inform the Customer of the reasons for the interconnection equipment/protective devices/control systems; (2) if the Customer disagrees with the conclusion, then the Customer would meet with representatives from the Company to discuss the matter; (3) additional analyses may be conducted by the Company at the request of a Customer that questions the need for particular interconnection equipment/protective devices/control systems if the Customer pays for the analyses; (4) if the Customer continues to disagree with the conclusion, then the Customer would write to the Company's Contact Person explaining the position of the Customer, and the Company's Contact Person would respond in writing within

HAWAIIAN ELECTRIC COMPANY, INC.

² The Company, for good cause, may modify the time limit. If the Company modifies the time limit, it shall notify the Customer in writing of the modification and the cause for the modification.

fifteen (15) business days³ (so that any dispute is reduced to writing); (5) if the parties continue to have a dispute, then authorized representatives from the Company and Customer (having full authority to settle the dispute), would meet in Hawaii (or by telephone conference) with the meeting to be scheduled within fifteen (15) business days of a written request and attempt in good faith to resolve the dispute; and (6) if the parties continue to have a dispute, then the parties may engage in a form of alternative dispute resolution agreeable to both parties, or a party may request that the Commission resolve the matter by filing a written request with the Commission attaching the relevant information and correspondence, and serving the request on the other party and the Division of Consumer Advocacy of the Department of Commerce and Consumer Affairs of the State of Hawaii.

c. Customers are not required to exhaust the Company's dispute resolution procedures set forth above before proceeding under provisions applicable to informal or formal complaints or other provisions contained under the Rules of Practice and Procedure before the Public Utilities Commission, currently codified in Title 6, Chapter 61, Subchapter 5 of the Hawaii Administrative Rules, or any other applicable statutes, orders, rules, or regulations. If any such proceeding is initiated, the Customer shall notify the Company's Contact Person in writing that it does not desire to continue the Company's dispute resolution procedures.

³ The Company, for good cause, may modify the time limit. If the Company modifies the time limit, it shall notify the Customer in writing of the modification and the cause for the modification.

7. Modifications to Interconnection Applications

- a. The provisions of this Section 7 shall apply only to those Customer
 Interconnection Applications for Generating Facilities under a Commission-approved DER program.
- b. With respect to each Interconnection Application submitted by the Customer, the Company shall allow the Customer to make modifications to each such Interconnection Application which increase the system capacity of the Customer's installed Generating Facility by up to 1 kW (100 Watts for Hawaii Electric Light) (when compared to the Customer's original Interconnection Application for such Generating Facility), provided that, in each case, the Customer submits a written request to the Company identifying a reasonable basis for such capacity expansion. For purposes of this Section 7.b, "reasonable basis" may include, without limitation: changes to the Company's qualified equipment list, switching contractors, non-availability of original equipment (and/or availability of better equipment), roof alterations or changes in shading, improved analysis of home electricity use and the evolving equipment requirements of third-party system financing or leasing companies.

HAWAIIAN ELECTRIC COMPANY, INC.

Superseding <u>Revised</u> Sheet No. 34D-32 Effective <u>July 9</u>, 2021

REVISED SHEET NO. 34D-32 Effective March 1, 2022

c. Any 1 kW increase permitted under this Section 7 shall be measured against the lowest or initial conditional approval system size on record for the Generating Facility, whichever is less.

d. The 1 kW allowance provided pursuant to this Section 7 will not be applied against Commission-approved DER program caps after the applicable DER program capacity limit has been reached. However, the 1 kW allowance provided pursuant to this Section 7 will be applied against Commission-approved DER program caps while the applicable DER program is open and program capacity remains available. For tracking and monitoring purposes, the Company shall maintain a record of all Customers that have, since June 29, 2018, requested, and been approved for, an allowance up to 1 kW under Section 7.b above.

e. With respect to each Interconnection Application submitted by the Customer participating in the Emergency Demand Response Program's Scheduled Dispatch Program, the Company shall allow the Customer to make modifications to each such Interconnection Application which increase the system capacity of the Customer's installed Generating Facility, provided that, in each case, the Customer submits the requisite documentation for participation in the Scheduled Dispatch Program. If an additions results in an additional post inverter alternating current generation capacity in excess of 5 kVA, such Generation Facility addition must be limited to no more than twice the capacity of the Battery Storage Facility.

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Superseding	SHEET NO. 34D-33
Effective Jul	y 9, 2021

Revised SHEET NO. 34D-33 Effective March 1, 2022

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f. Any increase permitted under this Section 7 for the participation in the Scheduled Dispatch Program shall be measured against the lowest or initial conditional approval system size on record for the Generating Facility, whichever is less.

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g. The increase permitted under this Section 7 for the participation in the Scheduled Dispatch Program shall be measured as the post-inverter alternating current power, meaning the sum of the lower of the new generation direct current and the inverter alternating current nominal power ratings per inverter.

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h. The increase provided pursuant to this Section 7 for participation in the Scheduled Dispatch Program will not be applied against Commission-approved DER program caps. The Company will report on generation coming from the Scheduled Dispatch Program and will also provide a breakdown of which underlying DER tariffs the customers are participating in for purposes of the Scheduled Dispatch Program.

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Transmittal Letter Dated July 29, 2021.

HAWAIIAN ELECTRIC COMPANY, INC.

Docket No. 2019-0323, Decision and Order No. 38196 filed January 25, 2022 Transmittal Letter Dated February 4, 2022. Superseding Revised Sheet No. 49.30-A Effective July 9, 2021

Revised Sheet No. 49.30-A Effective March 1, 2022

Rule No. 31

Emergency Demand Response Program Rider: Scheduled Dispatch Program

AVAILABILITY FOR CUSTOMER BATTERY STORAGE-OPERATORS

Emergency Demand Response Program participation is available to new and existing Eligible Customer Battery Storage-Operators who own and operate a battery storage system charged from an Eligible Customer-Generator's owned or leased Generating Facility under the Company's Net Energy Metering ("NEM"), Customer Self-Supply, Customer Grid-Supply, Customer Grid-Supply Plus, Smart Export, or Standard Interconnection Agreement programs as described in Rule Nos. 18, 22, 23, 24, 25, and Rule 14H Appendix II, respectively ("Battery Storage Facility").

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Transmittal Letter Dated July 29, 2021.

Docket No. 2019-0323, Decision and Order No. 38196 filed January 25, 2022. Transmittal Letter Dated February 4, 2022.

HAWAIIAN ELECTRIC COMPANY, INC.

Superseding Revised Sheet No. 49.30-B Effective July 9, 2021

Revised Sheet No. 49.30-B Effective March 1, 2022

Rule No. 31

Emergency Demand Response Program

Rider: Scheduled Dispatch Program

A. AVAILABILITY

Scheduled Dispatch Program ("SDP" or "Battery Bonus Program") participation is available to new and existing Eligible Customer Battery Storage-Operators who own and operate a battery storage system charged from an Eligible Customer-Generator's owned or leased Generating Facility under the Company's Net Energy Metering, Customer Self-Supply, Customer Grid-Supply, Customer Grid-Supply Plus, Smart Export, or Standard Interconnection Agreement programs as described in Rule Nos. 18, 22, 23, 24, 25, and Rule 14H Appendix II, respectively ("Battery Storage Facility") where:

- Eligible Customer Battery Storage-Operators execute the Scheduled Dispatch Program
 Agreement, provided as Appendix A of this Rule ("SDP Agreement"), memorializing
 their participation in the Battery Bonus Program and specifying the Committed Capacity
 (defined below) of their Battery Storage Facility,
- 2. Eligible Customer Battery Storage-Operators may add_additional post inverter alternating current generation capacity¹ in coordination with their battery installation by submitting an amendment to the interconnection agreement governing the underlying Generating Facility ("SDP Amendment"), provided, however, that for additional post inverter alternating current generation capacity in excess of 5 kVA, such Generation Facility addition must be limited to no more than twice the capacity of the Battery Storage Facility.
- 3. If the Eligible Customer Battery Storage-Operator is not a party to the interconnection agreement governing the underlying Generating Facility (e.g., as the "Customer-Generator" or the "Owner/Operator"), the SDP Amendment shall make the Eligible Customer Battery Storage-Operator an additional party to such interconnection agreement with respect to the Battery Storage Facility and any generation capacity added to the underlying Generating Facility subject to the limitations of this Rule, and
- Participation in the Battery Bonus Program does not inhibit Eligible Customer Battery
 Storage-Operators from fulfilling performance commitments of other grid services and
 demand response options, if dual participation is feasible.

B. ENROLLMENT

 SDP will begin enrollment on July 1, 2021 and enrollment will be available until total enrolled SDP capacity reaches 50 megawatts ("MW") or until June 20, 2023, whichever comes first, unless otherwise ordered by the Commission.

¹ As referenced herein, "post inverter alternating current generation capacity" refers to the power measured at the alternating current output terminals of the inverter.

HAWAIIAN ELECTRIC COMPANY, INC.

Docket No. 2019-0323, Decision and Order No. 38196 filed January 25, 2022. Transmittal Letter Dated February 4, 2022.

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Transmittal Letter Dated July 29, 2021.

Revised Sheet No. 49.30-C Effective March 1, 2022

Rule No. 31

Emergency Demand Response Program

Rider: Scheduled Dispatch Program

- 2. Enrollment in SDP is a ten-year commitment comprised of an initial phase ending for all participants on December 31, 2023 and a final phase commencing on January 1, 2024 and continuing for the remainder of the Eligible Customer Battery Storage-Operator's ten-year commitment. During the final phase of their ten-year commitment, each Eligible Customer Battery Storage-Operator will have the option to (a) continue operating their Battery Storage Facility under the SDP pursuant to this Rule or (b) transition to an alternative dispatch program upon meeting the applicable eligibility requirements for such alternative program.
- 3. The Eligible Customer Battery Storage-Operator's ten-year commitment under this Rule begins on the Battery Storage Facility's operational date, which is the first day (of the seven consecutive days) the Eligible Customer Battery Storage-Operator provides operational performance data of the Battery Storage Facility in connection with, and meeting the requirements of, the verification process outlined in section B.4 below.
- 4. To complete the enrollment process of executing the SDP Agreement, the Eligible Customer Battery Storage-Operator shall provide:
 - a. A complete validation package as required by Rule 14H,
 - b. A completed SDP Amendment, signed by the Eligible Customer Battery-Storage
 Operator (with the Company's countersignature of the SDP Amendment to be
 provided no later than 10 business days after the validation package has been
 approved by the Company).
 - c. A completed SDP Agreement, signed by the Eligible Customer Battery Storage-Operator (with the Company's countersignature of the SDP Agreement to be provided no later than 5 business days after all the requirements of this section B.4 are met),
 - d. Operational proof of start time and discharge of 2-hour duration of the Battery Storage Facility
 - e. Federal tax form W-9 ("Form W-9"), and
 - f. Seven (7) consecutive days of operational performance data in five (5) minute intervals, if possible, or fifteen (15) minute intervals as necessary for the Company to verify the Battery Storage Facility discharges the Committed Capacity for the Dispatch Period in compliance with this Rule. The Company shall be required to complete such verification within 10 business days of the receipt of such performance data from Eligible Customer Battery Storage-Operator.
 - g. If no reasonable requests for additional data or concerns are expressed regarding the Committed Capacity or operation of the Battery Storage Facility as specified in section C of this Rule are communicated (in written or digital form) to the Eligible Customer Battery Storage-Operator by the Company within the 10 business day verification period described in section B.4.f, the Eligible Customer Battery Storage-Operator will be deemed verified as operating in compliance with this Rule.

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Transmittal Letter Dated July 1, 2021.

Sheet No. 49.30-C.1 Effective March 1, 2022

Rule No. 31

Emergency Demand Response Program

Rider: Scheduled Dispatch Program

C. OPERATION

1. The Eligible Customer Battery Storage-Operator shall specify in its SDP Agreement the capacity level (kW) at which they commit to maintain the discharge level from their Battery Storage Facility ("Committed Capacity") for a duration of two consecutive hours each day ("Dispatch Period"). The Dispatch Period will be specified by the Company at the time of enrollment and may be revised by the Company upon written notice to the Eligible Customer Battery Storage-Operator; provided that the Eligible Customer Battery Storage-Operator shall have six months from the date of such written notice to implement such revision.

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Superseding Revised Sheet No. 49.30-D Effective July 9, 2021

Revised Sheet No. 49.30-D Effective March 1, 2022

Rule No. 31

Emergency Demand Response Program Rider: Scheduled Dispatch Program

- 2. Energy discharged during the Dispatch Period from the Battery Storage Facility may either serve onsite load or be exported to the grid. The Eligible Customer Battery Storage-Operator shall be required to manage their Battery Storage Facility to automatically prioritize battery charging during periods of substantial solar panel insolation in order to most reliably serve the two-hour battery discharge commitment as scheduled by the Company.
- 3. Notwithstanding any other provision specified in the underlying Generating Facility's governing program tariff or in the interconnection agreement to which the Eligible Customer Battery Storage-Operator is a party (or is made a party as provided under this Rule), as applicable, energy exported to the grid from the Battery Storage Facility for the Battery Bonus Program during the Dispatch Period is permitted and, if applicable, compensated in accordance with the underlying Generating Facility's governing program tariff.
 - For the first three (3) years of Battery Bonus Program participation, non-NEM customers will be compensated a fixed monthly export credit.
 - b. Fixed monthly export credit = (the sum of the Non-Fuel Energy Charges and all per-kWh charges, adjustments, and surcharges applicable to the customer's rate schedule using February 2022 rates, adjustments, and surcharges (\$/kWh), non-NEM DER tariff export rate (\$/kWh)) x Committed Capacity (kW) x 70% x 2 hours x 30 days. For this calculation the customer's rate schedule is the customer's rate schedule on the SDP Agreement execution date.
 - c. Fixed monthly export credits cannot be applied to the minimum charge and cannot be applied to any non-bypassable charges. Fixed monthly export credits will be tracked for a twelve billing month period from the time of the start of the Battery Bonus Plus contract to the twelfth bill following the start of the Battery Bonus Plus Contract and for each twelve billing month period thereafter. Fixed monthly export credits that are not applied to a customer's bill may be applied to the customer's subsequent bill within the same twelve billing month period described above. Coincident with the twelfth bill following the start of the Battery Bonus Plus contract and each twelve month period thereafter, any fixed monthly export credits that are not applied will be forfeited.

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In the event that solar insolation is insufficient to allow the Battery Storage Facility to meet the SDP requirement of providing the Committed Capacity for the Dispatch Period, the Eligible Customer Battery Storage-Operator will still be deemed to be in compliance with such requirement, provided the Battery Storage Facility is paired with a Generating Facility with a ratio of at least 1 kW of generation for every 2 kWh of Committed Capacity, as identified in the SDP Agreement. ¶

All participating systems shall have Volt-Watt activation for the term of the project and meet current Advanced Inverter setting requirements. ¶ Eligible Customer Battery Storage-Operator shall use the default ramp rate of equipment for the Committed Capacity during the Dispatch Period. Deviations from the default ramp rate may be required in certain circumstances where the default ramp rate may pose adverse impacts to grid power quality. The Company will notify the Eligible Customer Battery Storage-Operator of any such deviation when the Dispatch Period is specified or revised as described in Section C.1.¶

Deleted: Docket No. 2019-0323, Order No. 37885 filed July 28, 2021.¶
Transmittal Letter Dated July 29, 2021.

Sheet No. 49.30-D.1 Effective March 1, 2022

Rule No. 31

Emergency Demand Response Program

Rider: Scheduled Dispatch Program

- d. After the first year, Company reserves the right to adjust the 70% factor in the fixed monthly export credit equation upon delivery of supported documentation to justify a different rate.
- e. Participants participating in Grid Service Purchase Agreement and not Battery
 Bonus Program are also eligible to receive this 3-year fixed monthly export credit.
- 4. In the event that solar insolation is insufficient to allow the Battery Storage Facility to meet the SDP requirement of providing the Committed Capacity for the Dispatch Period, the Eligible Customer Battery Storage-Operator will still be deemed to be in compliance with such requirement, provided the Battery Storage Facility is paired with a Generating Facility with a ratio of at least 1 kW of generation for every 2 kWh of Committed Capacity, as identified in the SDP Agreement.
- All participating systems shall have Volt-Watt activation for the term of the project and meet current Advanced Inverter setting requirements.
- 6. Eligible Customer Battery Storage-Operator shall use the default ramp rate of equipment for the Committed Capacity during the Dispatch Period. Deviations from the default ramp rate may be required in certain circumstances where the default ramp rate may pose adverse impacts to grid power quality. The Company will notify the Eligible Customer Battery Storage-Operator of any such deviation when the Dispatch Period is specified or revised as described in Section C.1.

D. COMPENSATION

Participation in the <u>Battery Bonus Program</u> shall be compensated by a one-time incentive payment ("Incentive Payment") based on the Battery Storage Facility's demonstrated Committed Capacity for the Dispatch Period in accordance with this Rule. The Incentive Payment shall be determined as of the SDP Amendment approval date pursuant to the table below:

Total SDP Committed Capacity MW	Incentive Payment Rate
First 15 MW	\$850/kW of Committed Capacity
Next 15 MW	\$750/kW of Committed Capacity
Next 20 MW (not to exceed 50 MW in total)	\$500/kW of Committed Capacity

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HAWAIIAN ELECTRIC COMPANY, INC.

Docket No. 2019-0323, Decision and Order No. 38196 filed January 25, 2022. Transmittal Letter Dated February 4, 2022.

Superseding Revised Sheet No. 49.30-E Effective July 9, 2021

Revised Sheet No. 49.30-E Effective March 1, 2022

Rule No. 31

Emergency Demand Response Program Rider: Scheduled Dispatch Program

2. The Eligible Customer Battery Storage-Operator must demonstrate compliance as described section B.3 with this Rule prior to receiving the Incentive Payment.

- The Incentive Payment will be paid in full within 30 days of the SDP Agreement
 execution date. Payments shall be made directly to the owner of the Battery Storage
 Facility as identified in the SDP Agreement.
- 4. If the Eligible Customer Battery Storage-Operator does not operationalize its conditionally approved Battery Storage Facility by December 31, 2023, the Company will void the conditional approval to install and therefore will not owe the Eligible Customer Battery Storage-Operator any Incentive Payment.
- Eligible Customer Battery Storage-Operators, as an additional incentive reflected on their utility bill, will receive a monthly peak capacity incentive (\$5/kW x Committed Capacity) ("Monthly Peak Capacity Payment") for 10-year period from enrollment.

E. FAILURE TO PERFORM

If the Company identifies concerns or issues relating to the Battery Storage Facility's performance, including, without limitation, potential non-compliance with this Rule pertaining to the discharge of Committed Capacity for the Discharge Period, the Company may conduct a performance audit to monitor and document conditions.

- 1. The Company shall provide the Eligible Customer Battery Storage-Operator written or digital notice at least seven (7) days in advance of any performance audit.
- Eligible Customer Battery Storage-Operators are required to provide five (5) minute interval data, if possible, or fifteen (15) minute interval data as necessary to verify operation of Battery Storage Facility as specified in section C of this Rule within 5 business days of request from Company.
- 3. If the Battery Storage Facility fails to perform in compliance with this Rule, the Company will provide to the Eligible Customer Battery Storage-Operator a written notice of Failure to Perform, which will include documentation explaining the noncompliance of operation. The Eligible Customer Battery Storage-Operator will have 30 days from the date of such notice of Failure to Perform to cure the noncompliance.
- 4. If the non-compliance persists beyond the 30-day cure period, the Eligible Customer Battery Storage-Operator (recipient of the one-time Incentive Payment, Monthly Peak Capacity Payment and Monthly fixed export credit (as applicable)) will not receive the monthly payments and may be charged up to \$150 monthly until either the non-compliance is rectified or the Company has recovered the full prorated Incentive Payment amount.

HAWAIIAN ELECTRIC COMPANY, INC.

Docket No. 2019-0323, Decision and Order No. 38196 filed January 25, 2022. Transmittal Letter Dated February 4, 2022.

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Transmittal Letter Dated July 29, 2021.

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Revised Sheet No. 49.30-F Effective March 1, 2022

Rule No. 31

Emergency Demand Response Program

Rider: Scheduled Dispatch Program

5. If the non-compliance continues for a duration of 12 months, the Company will automatically terminate the customer, and will seek a repayment of the Incentive Payment amount, prorated from the commencement of noncompliance date. If the Eligible Customer Battery Storage-Operator's repayment of such prorated amount is not promptly made in a single lump sum payment, the Eligible Customer Battery Storage-Operator's repayment of such prorated amount shall be made in 12 equal monthly installments to the Company.

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F. TERMINATION

- Notwithstanding their ten-year commitment under this Rule, the Eligible Customer Battery Storage-Operator may terminate, or a new account holder may assume, their SDP Agreement with written or digital notice provided 60 days prior to date of termination or assumption.
- 2. If termination occurs prior to the completion of the ten-year commitment, the Eligible Customer Battery Storage-Operator must remove the Battery Storage Facility, including associated solar panels, or transfer the same to an available DER Tariff through an amendment. Such Battery Storage Facility must remain non-operational until such time as it is removed or transferred to an alternative tariff.
- 3. If termination occurs prior to completion of the ten-year commitment, the Eligible Customer Battery Storage-Operator shall return a prorated portion of the Incentive Payment received. The prorated portion shall be based on the remaining portion of the ten-year commitment, calculated from the date of termination as a fraction of the Eligible Customer Battery Storage-Operator's ten-year commitment.
- 4. The Company will bill the prorated amount to the Eligible Customer Battery Storage-Operator. If the Eligible Customer Battery Storage-Operator's return of such prorated amount is not promptly made in a single lump sum payment, the Eligible Customer Battery Storage-Operator's return of such prorated amount shall be made in twelve equal monthly installments. The Company will not charge interest on a payment if final payment is made within one year of date of termination. Eligible Customer Battery Storage-Operators that are not direct customers must pay prorated amount in full. If the Eligible Customer Battery Storage-Operator decides to terminate their SDP Agreement during a non-compliance period, the non-compliance charges imposed pursuant to section E.5 and paid by the Eligible Customer Battery Storage-Operator will be applied towards the prorated Incentive Amount required to be returned by the Eligible Customer Battery Storage-Operator.

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Transmittal Letter Dated July 29, 2021.

HAWAIIAN ELECTRIC COMPANY, INC.

Docket No. 2019-0323, Decision and Order No. 38196 filed January 25, 2022. Transmittal Letter Dated February 4, 2022.

Sheet No. 49.30-G Effective March 1, 2022

Rule No. 31

Emergency Demand Response Program Rider: Scheduled Dispatch Program

G. METERING AND BILLING

- The Company will supply, install, own, and maintain all necessary meters and associated equipment utilized for billing, energy purchase, and performance auditing. The meters will be tested and read in accordance with the rules of the Commission and the Company.
- 2. Energy exported to the grid from the Battery Storage Facility will be compensated at applicable Energy Credit Rates for the Eligible Customer Battery Storage-Operator, as specified in the underlying Generating Facility's governing program tariff.
- 3. All rates, terms, and conditions from the applicable rate schedule will apply, as modified by the applicable program tariff, if applicable.

Superseding	Revised	Sheet	No.	49.31-A	. Revised S	Sheet No	. 49.	31-A
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APPENDIX A

BATTERY BONUS PROGRAM AGREEMENT

This Scheduled Dispatch Program	or Battery	Bonus	Program	Agreement ("Agreement"
is made by and between:					

Hawaiian Electric Company, Inc.	("Company") and
O	("Customer Battery Storage-
Operator")	
and is made, effective and binding as of	("Effective Date")
The Company and the Customer Battery Storage- as a "Party" and collectively as the "Parties"	Operator may each be referred to individually

WHEREAS, Company is an operating electric public utility subject to the Hawaii Public Utilities Law, Hawaii Revised Statutes, Chapter 269, and the rules and regulations of the Hawaii Public Utilities Commission ("Commission");

WHEREAS, the Customer Battery Storage-Operator qualifies as an "Eligible Customer Battery Storage-Operator," as defined in the Company's Emergency Demand Response Program tariff and its associated Scheduled Dispatch Program Rider ("SDP Tariff");

WHEREAS, the Customer Battery Storage-Operator intends to own and operate a battery storage system charged from an Eligible Customer-Generator's owned or leased Generating Facility governed by the Underlying Agreement, defined below, pursuant to the requirements of the Scheduled Dispatch Program ("Battery Storage Facility");

WHEREAS, the underlying Generating Facility that will charge the Battery Storage Facility is governed by an interconnection agreement with the Company dated _______("Underlying Agreement") under the Company's Net Energy Metering ("NEM"), Customer Self-Supply, Customer Grid-Supply, Customer Grid-Supply Plus, Smart Export, or Standard Interconnection Agreement programs as described in Rule Nos. 18, 22, 23, 24, 25, and Rule 14H Appendix II, respectively;

WHEREAS, the Customer Battery Storage-Operator is, or shall be made, a party to the Underlying Agreement for purposes of its participation in the Scheduled Dispatch Program; and

WHEREAS, this Agreement is contingent upon and supplements the Underlying Agreement which, as may be amended, shall continue in full force and effect notwithstanding the Customer Battery Storage-Operator's participation in the Company's Scheduled Dispatch Program pursuant to this Agreement;

NOW, THEREFORE, in consideration of the premises and the respective promises herein, the Company and the Customer Battery Storage-Operator hereby agree as follows:

HAWAIIAN ELECTRIC COMPANY, INC.

Docket No. 2019-0323, <u>Decision and Order No. 38196</u> filed <u>January 25</u>, 2022. Transmittal Letter Dated <u>February 4</u>, 2022.

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- Notice and Disclaimer Regarding Future Rate and Tariff Modifications. This
 Agreement shall, at all times, be subject to modification by the Commission as said
 Commission may, from time to time, direct in the exercise of its jurisdiction. Without
 limiting the foregoing, Customer Battery Storage-Operator expressly acknowledges the
 following:
 - The Emergency Demand Response Program and its associated Scheduled Dispatch Program are subject to modification by the Hawaii Public Utilities Commission ("Commission").
 - Your Agreement and the Battery Storage Facility shall be subject to any future
 modifications ordered by the Commission. Such modifications may positively or
 negatively impact any potential savings in your electricity bill that were
 calculated by you or presented to you to support your decision to buy or lease a
 Battery Storage Facility and may otherwise change the value of your Agreement
 and Battery Storage Facility. You agree to pay for any costs related to such
 Commission ordered modifications.

BY SIGNING BELOW, YOU ACKNOWLEDGE THAT YOU HAVE READ, UNDERSTAND AND AGREE TO THE ABOVE NOTICE AND DISCLAIMER. FURTHER, BY SIGNING BELOW, YOU CONFIRM YOUR UNDERSTANDING THAT ANY POTENTIAL SAVINGS IN YOUR ELECTRICITY BILL THAT WERE CALCULATED BY YOU OR PRESENTED TO YOU TO SUPPORT YOUR DECISION TO BUY OR LEASE A BATTERY STORAGE FACILITY MAY CHANGE.

2. <u>Effectiveness of Agreement.</u> This Agreement shall not be effective until approved and executed by each Party, i.e., upon the Effective Date. Customer Battery Storage-Operator shall not operate the Battery Storage Facility prior to approval and execution of this Agreement by the Company, except to the extent allowed for by the Underlying Agreement or to the extent necessary to obtain governmental and utility approvals. Until this Agreement is effective, no Party shall have any legal obligations that extend beyond the Underlying Agreement, arising hereunder, express or implied, and any actions taken by a Party in reliance on the terms of this Agreement prior to the Effective Date shall be at that Party's own risk.

Superseding	Revised	Sheet	No.	49.31-C	Revised	Sheet	No.	49.31-C
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3. Underlying Interconnection Agreement. Customer Battery Storage-Operator's Battery Storage Facility enrollment and participation under the Scheduled Dispatch Program is contingent upon current enrollment of the underlying Generating Facility in the Company's Net Energy Metering, Customer Self-Supply, Customer Grid-Supply, Customer Grid-Supply Plus, Smart Export, or Standard Interconnection Agreement programs as described in Rule Nos. 18, 22, 23, 24, 25, and execution and non-default of the Underlying Agreement. This Agreement shall supplement the Underlying Agreement which, as may be amended, shall continue in full force and effect notwithstanding the Customer Battery Storage-Operator's participation in the Company's Schedule Dispatch Program pursuant to this Agreement.

- SDP Tariff. Unless otherwise provided herein, the terms and conditions governing 4. Customer Battery Storage-Operator's participation in the Battery Bonus Program shall be as set forth in Company's SDP Tariff.
- 5. **Enrollment and Operation.** Customer Battery Storage-Operator hereby agrees to commit to the following capacity (kW) of maintained discharge from the Battery Storage Facility ("Committed Capacity") on a preset schedule for a daily duration of two hours.

Customer Battery Storage-Operator's Committed Capacity:	1	k
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The daily two-hour period during which the Committed Capacity will be dispatched ("Dispatch Period") will be specified by the Company at the time of enrollment and may be revised by the Company with reasonable notice.

- a) Within 30 days of commencement of discharge of Committed Capacity, Customer Battery Storage-Operator must provide seven (7) consecutive days of operational performance data in five (5) minute intervals, if possible, or fifteen (15) minute intervals as necessary to verify the operation of the Battery Storage Facility in accordance with this Agreement. The Company shall complete such verification within 10 business days of the receipt of such performance data from Customer Battery Storage-Operator.
- b) If no reasonable requests for additional data or concerns are expressed regarding operation of the Battery Storage Facility as specified in this Agreement are communicated (in written or digital form) to the Customer Battery Storage-Operator by Company within 10 business day verification period, the Customer Battery Storage-Operator will be deemed verified as operating in compliance with this Agreement.
- c) Notwithstanding any other provision specified in the underlying program tariff in which the Customer Battery Storage-Operator participates or in the interconnection agreement to which the Customer Battery Storage-Operator is a party, as applicable, energy exported to the grid from the Battery Storage Facility during the Dispatch Period shall be permitted and, if applicable, compensated in accordance with the Customer Battery Storage-Operator's underlying program tariff.

HAWAIIAN ELECTRIC COMPANY, INC.

Docket No. 2019-0323, Decision and Order No. 38196 filed January 25, Transmittal Letter Dated February 4, 2022.

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Transmittal Letter Dated July 29, 2021.¶

Superseding Sheet No. 49.31-D

Revised Sheet No. 49.31-D

Effective July 1, 2021 Effective March 1, 2022

For the first three (3) years of Battery Bonus Program participation, non-NEM customers will be compensated a fixed monthly export credit.

Fixed monthly export credit = (retail rate as of February 2022 rate (\$/kWh) - non-NEM DER tariff export rate (\$/kWh)) x Committed Capacity (kW) x 70% x 2 hours x 30 days

Fixed monthly export credit will be zeroed out at the end of the

After the first year, Company reserves the right to adjust the 70% factor in the fixed monthly export credit equation upon delivery of supported documentation to justify a different rate.

- d) Energy discharged during the Dispatch Period from the Battery Storage Facility may either serve onsite load or be exported to the grid. Customer Battery Storage-Operator enrolled in Scheduled Dispatch is required to manage their DER systems to automatically prioritize battery charging during periods of substantial solar panel insolation in order to most reliably serve the two-hour battery discharge commitment as scheduled by the Company.
- Customer Battery Storage-Operator shall use the default ramp rate of equipment for the Committed Capacity during the Dispatch Period. Deviations from the default ramp rate may be required in certain circumstances where the default ramp rate may pose adverse impacts to grid power quality. The Company will notify the Customer Battery Storage-Operator of any such deviation when the Dispatch Period is specified or revised.
- 6. **Term and Termination.** This Agreement shall continue for ten (10) years from the commencement of the discharge of Committed Capacity for the Dispatch Period in accordance with this Agreement. Customer Battery Storage-Operator may terminate this Agreement at any time with sixty (60) days written notice. If termination occurs prior to completion of its ten-year commitment, Customer Battery Storage-Operator shall return a prorated portion of the compensation received pursuant to the SDR Tariff. The prorated portion of the compensation shall be based on the remaining portion of the ten-year commitment, calculated from the date of termination as a fraction of the Customer Battery Storage-Operator's ten-year commitment. Customer Battery Storage-Operator may either pay such owed amount in full or make other arrangements with the Company prior to termination. The Company will not charge interest on a payment if final payment is made within one year of date of termination. Company may terminate this Agreement at any time if Customer Battery-Storage Operator fails to comply with any term of this Agreement, the Underlying Agreement, or if the Customer Battery-Storage Operator fails to be an Eligible Customer Battery-Storage Operator.
- Failure to Perform. If the Company identifies concerns or issues relating to the Battery Storage Facility's performance, including, without limitation, potential non-compliance with this Rule pertaining to the discharge of Committed Capacity for the Discharge Period, the Company may conduct a performance audit to monitor and document conditions.

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Transmittal Letter Dated July 1, 2021.¶

Sheet No. 49.31-D.1 Effective March 1, 2022

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- a) The Company shall provide the Customer Battery Storage-Operator written or digital notice at least seven (7) days in advance of any performance audit.
- b) Customer Battery Storage-Operator shall be required to provide five (5) minute interval data, if possible, fifteen (15) minute intervals as necessary to verify operation of the Battery Storage Facility in accordance with this Agreement with five (5) business days of request from Company.

Deleted: Docket No. 2019-0323, Decision & Order No. 37853 filed June 30, 2021.¶
Transmittal Letter Dated July 1, 2021.¶

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Revised Sheet No. 49.31-E Effective March 1, 2022

c) If the Battery Storage Facility fails to perform in compliance with this Rule, the Company will provide to the Customer Battery Storage-Operator a written notice of Failure to Perform, which will include documentation explaining the noncompliance of operation.

d) Customer Battery Storage-Operator will have 30 days from the date of such notice of Failure to Perform to cure the non-compliance.

- e) If the non-compliance persists beyond the 30-day cure period, Customer Battery Storage-Operator (recipient of the one-time Incentive Payment, Monthly Peak Capacity Payment and Monthly fixed export credit (as applicable)) will not receive the monthly payments and may be charged up to \$150 monthly until either the non-compliance is rectified or the Company has recovered the full prorated compensation paid to Customer Battery Storage-Operator pursuant to the SDR Tariff.
- Scope of Agreement. The Parties understand and agree that this Agreement is contingent upon the Underlying Agreement and applies only to the operation of Customer Battery Storage-Operator's Battery Storage Facility as specified by the Scheduled Dispatch Program.
- 9. Metering. Within fifteen (15) days of execution of this Agreement, the Company will supply, own, and maintain all necessary meters and associated equipment utilized for billing and energy purchase. The meters will be tested and read in accordance with the rules of the Commission and the Company. The Customer Battery Storage-Operator at its expense, shall provide, install and maintain all conductors, service switches, fuses, meter sockets, meter instrument transformer housing and mountings, switchboard meter test buses, meter panels and similar devices required for service connection and meter installations on the Customer Battery Storage-Operator's premises in accordance with the Company's Rule 14H.
- 10. <u>Compensation.</u> The terms regarding compensation to the Customer Battery System-Operator for its participation in the Company's Scheduled Dispatch Program shall be as set forth in the SDR Tariff. <u>If the battery system operator and owner of the battery facility are the same and has an account with Hawaiian Electric, that individual or entity must sign the Battery Bonus Program agreement.</u>
- 11. **Data and Private Information.** Company access to personal data, including information for tax reporting purposes, data related to the Battery Storage Facility performance and usage, electrical utility account information, usage history, and meter data is required for enrollment under the Company's Scheduled Dispatch Program. All data access, use, and sharing is subject to the terms of Hawaiian Electric's Customer Information Privacy Policy (available at https://www.hawaiianelectric.com/privacy-notice/customer-information-privacy-policy) and applicable law.
 - a) By executing this Agreement, Customer Battery Storage-Operator approves and consents to provide data required for enrollment under Scheduled Dispatch Program.
 - b) Tax Identification Number ("TIN") must be provided to Company via secure transfer prior to the Company executing this Agreement.

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Transmittal Letter Dated July 1, 2021.

Sheet No. 49.31-F Effective July 1, 2021

12. Indemnification.

a) The Customer Battery Storage-Operator shall indemnify, defend and hold harmless the Company and its officers, directors, agents and employees, from and against all liabilities, damages, losses, fines, penalties, claims, demands, suits, costs and expenses (including reasonable attorney's fees and expenses) to or by third persons, including the Company's employees or subcontractors, for injury or death, or for injury to property, arising out of the actions or inactions of the Customer Battery Storage-Operator (or those of anyone under its control or on its behalf) with respect to its obligations under this Agreement, and/or arising out of the installation, operation and maintenance of the Battery Storage Facility, except to the extent that such injury, death or damage is attributable to the gross negligence or intentional act or omission of the Company or its officers, directors, agents or employees.

Provided, however, where the Customer Battery Storage-Operator is an agency of the United States, the following Section shall be applicable in place of Paragraph 12(a):

"The United States understands that it may be held liable for loss, damages expense and liability to third persons and injury to or death of persons or injury to property caused by the United States in its engineering design, construction ownership or operations of, or the making of replacements, additions betterment to, or by failure of, any of such party's works or facilities used in connection with this Agreement to the extent allowed by the Federal Tort Claims Act 28 U.S.C. § 2671 et seq. and the Agreement Disputes Act of 1978, 41 U.S.C. §§ 601-613.

Company shall be responsible for damages or injury caused by Company, Company's agents, officers, and employees in the course of their employment to the extent permitted by law." Sheet No. 49.31-G Effective July 1, 2021

Provided, however, where the Customer Battery Storage-Operator is an agency of the State of Hawaii (the "State"), the following Section shall be applicable in place of Paragraph 12(a):

"The State shall be responsible for damages or injury caused by the State's agents, officers, and employees in the course of their employment to the extent that the State's liability for such damage or injury has been determined by a court or otherwise agreed to by the State. The State shall pay for such damage and injury to the extent permitted by law. The State shall use reasonable good faith efforts to pursue any approvals from the Legislature and the Governor that may be required to obtain the funding necessary to enable the State to perform its obligations or cover its liabilities hereunder. The State shall not request Company to indemnify the State for, or hold the State harmless from, any claims for such damages or injury.

Company shall be responsible for damages or injury caused by Company, Company's agents, officers, and employees in the course of their employment to the extent that Company's liability for such damage or injury has been determined by a court or otherwise agreed to by Company, and Company shall pay for such damage and injury to the extent permitted by law. Company shall not request the State to indemnify Company for, or hold Company harmless from, any claims for such damages or injury."

- b) The Company shall indemnify, defend and hold harmless the Customer Battery Storage-Operator, and its officers, directors, agents and employees, from and against all liabilities, damages, losses, fines, penalties, claims, demands, suits, costs and expenses (including reasonable attorney's fees and expenses) to or by third persons, including the Customer Battery Storage-Operator's employees or subcontractors, for injury or death, or for injury to property, arising out of the actions or inactions of the Company (or those of anyone under its control or on its behalf) with respect to its obligations under this Agreement, except to the extent that such injury, death or damage is attributable to the gross negligence or intentional act or omission of the Customer Battery Storage-Operator or its officers, directors, agents or employees.
- c) Nothing in this Agreement shall create any duty to, any standard of care with reference to, or any liability to any person not a party to it.

- 13. <u>Limitation of Liability.</u> Neither by inspection, if any, or non-rejection, nor in any other way, does the Company give any warranty, express or implied, as to the adequacy, safety, or other characteristics of any structures, equipment, wires, appliances or devices owned, installed or maintained by the Customer Battery Storage-Operator, including without limitation the Battery Storage Facility and any structures, equipment, wires, appliances or devices appurtenant thereto.
- 14. Force Majeure. For purposes of this Agreement, "Force Majeure Event" means any event: (a) that is beyond the reasonable control of the affected Party; and (b) that the affected Party is unable to prevent or provide against by exercising reasonable diligence, including the following events or circumstances, but only to the extent they satisfy the preceding requirements: (a) acts of war, public disorder, insurrection or rebellion; floods, hurricanes, earthquakes, lighting, storms, and other natural calamities; explosions or fires; strikes, work stoppages, or labor disputes; embargoes; and sabotage. If a Force Majeure Event prevents a Party from fulfilling any obligations under this Agreement, such Party will promptly notify the other Parties in writing and will keep the other Parties informed on a continuing basis of the scope and duration of the Force Majeure Event. The affected Party will specify in reasonable detail the circumstances of the Force Majeure Event, its expected duration, and the steps that the affected Party is taking to mitigate the effects of the event on its performance. The affected Party will be entitled to suspend or modify its performance of obligations under this Agreement, other than the obligation to make payments then due or becoming due under this Agreement, but only to the extent that the effect of the Force Majeure Event cannot be mitigated by the use of reasonable efforts. The affected Party will use reasonable efforts to resume its performance as soon as possible.
- 15. <u>Additional Information</u>. By signing this Agreement, the Customer Battery Storage-Operator expressly agrees and authorizes Company to (1) request and obtain additional information from Customer Battery Storage-Operator relating to the Battery Storage Facility, and/or (2) make modifications to the Customer Battery Storage-Operator's Battery Storage Facility, at no cost to the Company, where reasonably necessary, to serve the Customer Battery Storage-Operator under this Agreement or to ensure reliability, safety of operation, and power quality of the Company's system.
- 16. Notices. Any notice required under this Agreement shall be in writing and mailed at any United States Post Office with postage prepaid and addressed to the Party, or personally delivered to the Party at the address identified on the last page of the Agreement. Changes in such designation may be made by notice similarly given. Notice sent by mail shall be deemed to have been given on the date of actual delivery or at the expiration of the fifth day after the date of mailing, whichever is earlier.

17. Miscellaneous.

- a) Governing Law and Regulatory Authority. This Agreement was executed in the State of Hawaii and must in all respects be interpreted, governed, and construed under the laws of the State of Hawaii. This Agreement is subject to, and the Parties' obligations hereunder include, operating in full compliance with all valid, applicable federal, state, and local laws or ordinances, and all applicable rules, regulations, orders of, and tariffs approved by, duly constituted regulatory authorities having jurisdiction.
- b) Amendment, Modifications, or Waiver. This Agreement may not be altered or modified by any of the Parties, except by an instrument in writing executed by each of them. None of the provisions of this Agreement shall be considered waived by a Party unless such waiver is given in writing. The failure of a Party to insist in any one or more instances upon strict performance of any of the provisions of this Agreement or to take advantage of any of its rights hereunder shall not be construed as a waiver of any such provisions or the relinquishment of any such rights for the future, but the same shall continue and remain in full force and effect. This Agreement contains the entire agreement and understanding between the Parties, their agents, and employees as to the subject matter of this Agreement. Each Party also represents that in entering into this Agreement, it has not relied on any promise, inducement, representation, warranty, agreement or other statement not set forth in this Agreement.
- c) <u>Assignment.</u> This Agreement may not be assigned by any Party without the prior written consent of the other Parties. Such consent shall not be unreasonably withheld.
- d) <u>Binding Effect.</u> This Agreement shall be binding upon and inure to the benefit of the Parties hereto and their respective successors, legal representatives, and permitted assigns.
- e) Relationship of Parties. Nothing in this Agreement shall be deemed to constitute any Party hereto as partner, agent or representative of the other Parties or to create any fiduciary relationship between the Parties.
- f) <u>Limitations</u>. Nothing in this Agreement shall limit the Company's ability to exercise its rights or expand or diminish its liability with respect to the provision of electrical service pursuant to the Company's tariffs as filed with the Commission, or the Commission's Standards for Electric Utility Service in the State of Hawaii, which currently are included in the Commission's General Order Number 7, as either may be amended from time to time.

Sheet No. 49.31-J Effective July 1, 2021

g) Execution of Agreement; Multiple Counterparts. This Agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument binding all Parties notwithstanding that all of the Parties are not signatories to the same counterparts. Signatures may be provided in original ("wet") form or by other means intended to preserve the original graphic and pictorial appearance of the signature, such as a photocopy. A copy of a Party's signature shall be considered an "original" signature for purposes of this Agreement.

Docket No. 2019-0323, Decision & Order No. 37853 filed June 30, 2021. Transmittal Letter Dated July 1, 2021.

Superseding	Sheet	No.	49.	31-K
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Revised Sheet No. 49.31-K Effective March 1, 2022

Deleted: July Deleted: 1

IN WITNESS WHEREOF, the Parties hereto have caused two originals of this Agreement to be executed by their duly authorized representatives. This Agreement is effective as of the date first set forth above.

CUSTOMER BATTERY STORAGE-OPERATOR

Ву:		
Signature		Date
Name (Print):		
Company Name (if applicable):		
Title (if applicable):		
HAWAIIAN ELECTRIC COMPANY		
By:To be completed by Company Signature		To be completed by Company Date
Name (Print):	_ To be completed by Company _	
Title (if applicable):	To be completed by Company	
MAILING ADDRESS		
Hawaiian Flectric Company		

Hawaiian Electric Company Distributed Energy Resources Division P.O. Box 2750 (AT10-SE) Honolulu, HI 96840 HAWAIIAN ELECTRIC COMPANY, INC. Order No.

Deleted: CP12

Deleted: Docket No. 2019-0323, Decision & Order No. 37853 filed June 30, 2021.¶
Transmittal Letter Dated July 1, 2021.

Hawaiian Electric Company, Inc.

Exhibit 4
DER Parties' Proposed Revisions to
Rule No. 31
and
Rule No. 31 Appendix A

(Clean Version)

Revised Sheet No. 49.30-A Effective March 1, 2022

Rule No. 31

Emergency Demand Response Program

Rider: Scheduled Dispatch Program

AVAILABILITY FOR CUSTOMER BATTERY STORAGE-OPERATORS

Emergency Demand Response Program participation is available to new and existing Eligible Customer Battery Storage-Operators who own and operate a battery storage system charged from an Eligible Customer-Generator's owned or leased Generating Facility under the Company's Net Energy Metering ("NEM"), Customer Self-Supply, Customer Grid-Supply, Customer Grid-Supply Plus, Smart Export, or Standard Interconnection Agreement programs as described in Rule Nos. 18, 22, 23, 24, 25, and Rule 14H Appendix II, respectively ("Battery Storage Facility").

Revised Sheet No. 49.30-B Effective March 1, 2022

Rule No. 31

Emergency Demand Response Program

Rider: Scheduled Dispatch Program

A. AVAILABILITY

Scheduled Dispatch Program ("SDP" or "Battery Bonus Program") participation is available to new and existing Eligible Customer Battery Storage-Operators who own and operate a battery storage system charged from an Eligible Customer-Generator's owned or leased Generating Facility under the Company's Net Energy Metering, Customer Self-Supply, Customer Grid-Supply, Customer Grid-Supply Plus, Smart Export, or Standard Interconnection Agreement programs as described in Rule Nos. 18, 22, 23, 24, 25, and Rule 14H Appendix II, respectively ("Battery Storage Facility") where:

- 1. Eligible Customer Battery Storage-Operators execute the Scheduled Dispatch Program Agreement, provided as Appendix A of this Rule ("SDP Agreement"), memorializing their participation in the Battery Bonus Program and specifying the Committed Capacity (defined below) of their Battery Storage Facility,
- 2. Eligible Customer Battery Storage-Operators may add additional post inverter alternating current generation capacity¹ in coordination with their battery installation by submitting an amendment to the interconnection agreement governing the underlying Generating Facility ("SDP Amendment"); provided, however, that for additional post inverter alternating current generation capacity in excess of 5 kVA, such Generation Facility addition must be limited to no more than twice the capacity of the Battery Storage Facility.
- 3. If the Eligible Customer Battery Storage-Operator is not a party to the interconnection agreement governing the underlying Generating Facility (e.g., as the "Customer-Generator" or the "Owner/Operator"), the SDP Amendment shall make the Eligible Customer Battery Storage-Operator an additional party to such interconnection agreement with respect to the Battery Storage Facility and any generation capacity added to the underlying Generating Facility subject to the limitations of this Rule, and
- 4. Participation in the Battery Bonus Program does not inhibit Eligible Customer Battery Storage-Operators from fulfilling performance commitments of other grid services and demand response options, if dual participation is feasible.

B. ENROLLMENT

1. SDP will begin enrollment on July 1, 2021 and enrollment will be available until total enrolled SDP capacity reaches 50 megawatts ("MW") or until June 20, 2023, whichever comes first, unless otherwise ordered by the Commission.

HAWAIIAN ELECTRIC COMPANY, INC.

¹ As referenced herein, "post inverter alternating current generation capacity" refers to the power measured at the alternating current output terminals of the inverter.

Rule No. 31

Emergency Demand Response Program Rider: Scheduled Dispatch Program

- 2. Enrollment in SDP is a ten-year commitment comprised of an initial phase ending for all participants on December 31, 2023 and a final phase commencing on January 1, 2024 and continuing for the remainder of the Eligible Customer Battery Storage-Operator's ten-year commitment. During the final phase of their ten-year commitment, each Eligible Customer Battery Storage-Operator will have the option to (a) continue operating their Battery Storage Facility under the SDP pursuant to this Rule or (b) transition to an alternative dispatch program upon meeting the applicable eligibility requirements for such alternative program.
- 3. The Eligible Customer Battery Storage-Operator's ten-year commitment under this Rule begins on the Battery Storage Facility's operational date, which is the first day (of the seven consecutive days) the Eligible Customer Battery Storage-Operator provides operational performance data of the Battery Storage Facility in connection with, and meeting the requirements of, the verification process outlined in section B.4 below.
- 4. To complete the enrollment process of executing the SDP Agreement, the Eligible Customer Battery Storage-Operator shall provide:
 - a. A complete validation package as required by Rule 14H,
 - b. A completed SDP Amendment, signed by the Eligible Customer Battery-Storage Operator (with the Company's countersignature of the SDP Amendment to be provided no later than 10 business days after the validation package has been approved by the Company),
 - c. A completed SDP Agreement, signed by the Eligible Customer Battery Storage-Operator (with the Company's countersignature of the SDP Agreement to be provided no later than 5 business days after all the requirements of this section B.4 are met).
 - d. Operational proof of start time and discharge of 2-hour duration of the Battery Storage Facility,
 - e. Federal tax form W-9 ("Form W-9"), and
 - f. Seven (7) consecutive days of operational performance data in five (5) minute intervals, if possible, or fifteen (15) minute intervals as necessary for the Company to verify the Battery Storage Facility discharges the Committed Capacity for the Dispatch Period in compliance with this Rule. The Company shall be required to complete such verification within 10 business days of the receipt of such performance data from Eligible Customer Battery Storage-Operator.
 - g. If no reasonable requests for additional data or concerns are expressed regarding the Committed Capacity or operation of the Battery Storage Facility as specified in section C of this Rule are communicated (in written or digital form) to the Eligible Customer Battery Storage-Operator by the Company within the 10 business day verification period described in section B.4.f, the Eligible Customer Battery Storage-Operator will be deemed verified as operating in compliance with this Rule.

Rule No. 31

Emergency Demand Response Program

Rider: Scheduled Dispatch Program

C. OPERATION

1. The Eligible Customer Battery Storage-Operator shall specify in its SDP Agreement the capacity level (kW) at which they commit to maintain the discharge level from their Battery Storage Facility ("Committed Capacity") for a duration of two consecutive hours each day ("Dispatch Period"). The Dispatch Period will be specified by the Company at the time of enrollment and may be revised by the Company upon written notice to the Eligible Customer Battery Storage-Operator; provided that the Eligible Customer Battery Storage-Operator shall have six months from the date of such written notice to implement such revision.

Revised Sheet No. 49.30-D Effective March 1, 2022

Rule No. 31

Emergency Demand Response Program Rider: Scheduled Dispatch Program

- 2. Energy discharged during the Dispatch Period from the Battery Storage Facility may either serve onsite load or be exported to the grid. The Eligible Customer Battery Storage-Operator shall be required to manage their Battery Storage Facility to automatically prioritize battery charging during periods of substantial solar panel insolation in order to most reliably serve the two-hour battery discharge commitment as scheduled by the Company.
- 3. Notwithstanding any other provision specified in the underlying Generating Facility's governing program tariff or in the interconnection agreement to which the Eligible Customer Battery Storage-Operator is a party (or is made a party as provided under this Rule), as applicable, energy exported to the grid from the Battery Storage Facility for the Battery Bonus Program during the Dispatch Period is permitted and, if applicable, compensated in accordance with the underlying Generating Facility's governing program tariff, except that:
 - a. Exports during the Dispatch Period from non-NEM customers will receive a "Dispatch Credit." The Dispatch Credit shall be indexed to the underlying retail rate, or the otherwise applicable rate at the time of export for TOU and other advanced rate design customers.
 - b. Until AMI is deployed for these customers and billing software upgrades are completed to facilitate the Dispatch Credit, non-NEM customers shall receive an Interim Dispatch Credit. The Interim Dispatch Credit shall be calculated as a fixed monthly credit that computes the difference between the export rate of customers' underlying interconnection tariff and the retail (or TOU) rate as follows:
 - c. Interim Dispatch Credit = (the sum of the Non-Fuel Energy Charges and all perkWh charges, adjustments, and surcharges applicable to the customer's rate schedule using February 2022 rates, adjustments, and surcharges (\$/kWh) non-NEM DER tariff export rate (\$/kWh)) x Committed Capacity (kW) x 70% x 2 hours x 30 days. For this calculation the customer's rate schedule is the customer's rate schedule on the SDP Agreement execution date.
 - d. The Interim Dispatch Credit and Dispatch Credit, as applicable, will be zeroed out at the end of the year.
 - e. Non-NEM customers shall receive the Interim Dispatch Credit and Dispatch Credit, as applicable, for the 10-year program duration.
- 4. In the event that solar insolation is insufficient to allow the Battery Storage Facility to meet the SDP requirement of providing the Committed Capacity for the Dispatch Period, the Eligible Customer Battery Storage-Operator will still be deemed to be in compliance with such requirement, provided the Battery Storage Facility is paired with a Generating Facility with a ratio of at least 1 kW of generation for every 2 kWh of Committed Capacity, as identified in the SDP Agreement.
- 5. All participating systems shall have Volt-Watt activation for the term of the project and meet current Advanced Inverter setting requirements.

HAWAIIAN ELECTRIC COMPANY, INC.

Revised Sheet No. 49.30-D Effective March 1, 2022

Rule No. 31

Emergency Demand Response Program Rider: Scheduled Dispatch Program

6. Eligible Customer Battery Storage-Operator shall use the default ramp rate of equipment for the Committed Capacity during the Dispatch Period. Deviations from the default ramp rate may be required in certain circumstances where the default ramp rate may pose adverse impacts to grid power quality. The Company will notify the Eligible Customer Battery Storage-Operator of any such deviation when the Dispatch Period is specified or revised as described in Section C.1.

Rule No. 31

Emergency Demand Response Program

Rider: Scheduled Dispatch Program

D. COMPENSATION

 Participation in the Battery Bonus Program shall be compensated by a one-time upfront incentive payment ("Incentive Payment") based on the Battery Storage Facility's demonstrated Committed Capacity for the Dispatch Period in accordance with this Rule. The Incentive Payment shall be determined as of the SDP Amendment approval date pursuant to the table below:

Total SDP Committed Capacity MW	Incentive Payment Rate
First 15 MW	\$850/kW of Committed Capacity
Next 15 MW	\$750/kW of Committed Capacity
Next 20 MW (not to exceed 50 MW in total)	\$500/kW of Committed Capacity

Rule No. 31

Emergency Demand Response Program Rider: Scheduled Dispatch Program

- 2. In addition to the Incentive Payment, the utility customer of record will receive a monthly peak capacity incentive of \$5/kW x Committed Capacity ("Monthly Peak Capacity Payment") for the duration of the 10-year enrollment period. The Monthly Peak Capacity Payment shall be reflected as a bill credit on the customer's bill. The Company shall issue a check to the customer of record in January of the following year for any Monthly Peak Capacity Payment bill credits remaining at the end of the annual period. Customers that enrolled prior to May 1, 2022 will begin receiving the Monthly Peak Capacity Payment on their bill starting May 1, 2022. All other customers will receive this bill credit starting in the month following the customer's enrollment date, prorated as applicable.
- 3. The Eligible Customer Battery Storage-Operator must demonstrate compliance as described section B.3 with this Rule prior to receiving the Incentive Payment.
- 4. The Incentive Payment will be paid in full within 30 days of the SDP Agreement execution date. Payments shall be made directly to the owner of the Battery Storage Facility as identified in the SDP Agreement.
- 5. If the Eligible Customer Battery Storage-Operator does not operationalize its conditionally approved Battery Storage Facility by December 31, 2023, the Company will void the conditional approval to install and therefore will not owe the Eligible Customer Battery Storage-Operator any Incentive Payment or the Monthly Peak Capacity Payment.

E. FAILURE TO PERFORM

If the Company identifies concerns or issues relating to the Battery Storage Facility's performance, including, without limitation, potential non-compliance with this Rule pertaining to the discharge of Committed Capacity for the Discharge Period, the Company may conduct a performance audit to monitor and document conditions.

- 1. The Company shall provide the Eligible Customer Battery Storage-Operator written or digital notice at least seven (7) days in advance of any performance audit.
- 2. Eligible Customer Battery Storage-Operators are required to provide five (5) minute interval data, if possible, or fifteen (15) minute interval data as necessary to verify operation of Battery Storage Facility as specified in section C of this Rule within 5 business days of request from Company.
- 3. If the Battery Storage Facility fails to perform in compliance with this Rule, the Company will provide to the Eligible Customer Battery Storage-Operator a written notice of Failure to Perform, which will include documentation explaining the non-compliance of operation. The Eligible Customer Battery Storage-Operator will have 30 days from the date of such notice of Failure to Perform to cure the non-

HAWAIIAN ELECTRIC COMPANY, INC.

Revised Sheet No. 49.30-E Effective March 1, 2022

Rule No. 31

Emergency Demand Response Program

Rider: Scheduled Dispatch Program

compliance. The Eligible Customer Battery Storage Operator may request a reasonable extension of the cure period for good cause shown, for which the Company shall not unreasonably withhold.

4. If the non-compliance persists beyond the applicable cure period, the Eligible Customer Battery Storage-Operator (or recipient of the one-time Incentive Payment, Monthly Peak Capacity Payment and Monthly fixed export credit (as applicable)) will not receive the monthly payments and may be charged up to \$150 monthly until either the non-compliance is rectified or the Company has recovered the full prorated Incentive Payment amount.

Revised Sheet No. 49.30-F Effective March 1, 2022

Rule No. 31

Emergency Demand Response Program

Rider: Scheduled Dispatch Program

5. If the non-compliance continues for a duration of 12 months, the Company will automatically terminate the customer, and will seek a repayment of the Incentive Payment amount, prorated from the commencement of noncompliance date. If the Eligible Customer Battery Storage-Operator's repayment of such prorated amount is not promptly made in a single lump sum payment, the Eligible Customer Battery Storage-Operator's repayment of such prorated amount shall be made in 12 equal monthly installments to the Company.

F. TERMINATION

- 1. Notwithstanding their ten-year commitment under this Rule, the Eligible Customer Battery Storage-Operator may terminate, or a new account holder may assume, their SDP Agreement with written or digital notice provided 60 days prior to date of termination or assumption.
- 2. If termination occurs prior to the completion of the ten-year commitment, the Eligible Customer Battery Storage-Operator must transfer the system to an available DER Tariff through an amendment. Such Battery Storage Facility must remain non-operational until such time as it is transferred to an alternative tariff.
- 3. If termination occurs prior to completion of the ten-year commitment, the Eligible Customer Battery Storage-Operator shall return a prorated portion of the Incentive Payment received. The prorated portion shall be based on the remaining portion of the ten-year commitment, calculated from the date of termination as a fraction of the Eligible Customer Battery Storage-Operator's ten-year commitment.
- 4. The Company will bill the prorated amount to the Eligible Customer Battery Storage-Operator. If the Eligible Customer Battery Storage-Operator's return of such prorated amount is not promptly made in a single lump sum payment, the Eligible Customer Battery Storage-Operator's return of such prorated amount shall be made in twelve equal monthly installments. The Company will not charge interest on a payment if final payment is made within one year of date of termination. Eligible Customer Battery Storage-Operators that are not direct customers must pay prorated amount in full. If the Eligible Customer Battery Storage-Operator decides to terminate their SDP Agreement during a non-compliance period, the non-compliance charges imposed pursuant to section E.5 and paid by the Eligible Customer Battery Storage-Operator will be applied towards the prorated Incentive Amount required to be returned by the Eligible Customer Battery Storage-Operator.

Rule No. 31

Emergency Demand Response Program

Rider: Scheduled Dispatch Program

G. METERING AND BILLING

- The Company will supply, install, own, and maintain all necessary meters and associated equipment utilized for billing, energy purchase, and performance auditing. The meters will be tested and read in accordance with the rules of the Commission and the Company.
- 2. Energy exported to the grid from the Battery Storage Facility will be compensated at applicable Energy Credit Rates for the Eligible Customer Battery Storage-Operator, as specified in the underlying Generating Facility's governing program tariff or as otherwise provided in this Rule 31.
- 3. All rates, terms, and conditions from the applicable rate schedule will apply, as modified by the applicable program tariff, if applicable.

Revised Sheet No. 49.31-A Effective March 1, 2022

APPENDIX A

BATTERY BONUS PROGRAM AGREEMENT

This Scheduled Dispatch Program or Battery Bonus Program Agreement ("Agreement") is made by and between: Hawaiian Electric Company, Inc. ("Company") and _____("Customer Battery Storage-Operator") and is made, effective and binding as of ("Effective Date"). The Company and the Customer Battery Storage-Operator may each be referred to individually as a "Party" and collectively as the "Parties." WHEREAS, Company is an operating electric public utility subject to the Hawaii Public Utilities Law, Hawaii Revised Statutes, Chapter 269, and the rules and regulations of the Hawaii Public Utilities Commission ("Commission"); WHEREAS, the Customer Battery Storage-Operator qualifies as an "Eligible Customer Battery Storage-Operator," as defined in the Company's Emergency Demand Response Program tariff and its associated Scheduled Dispatch Program Rider ("SDP Tariff"); WHEREAS, the Customer Battery Storage-Operator intends to own and operate a battery storage system charged from an Eligible Customer-Generator's owned or leased Generating Facility governed by the Underlying Agreement, defined below, pursuant to the requirements of the Scheduled Dispatch Program ("Battery Storage Facility"): WHEREAS, the underlying Generating Facility that will charge the Battery Storage Facility is governed by an interconnection agreement with the Company dated ("Underlying Agreement") under the Company's Net Energy Metering ("NEM"), Customer Self-Supply, Customer Grid-Supply, Customer Grid-Supply Plus, Smart Export, or Standard Interconnection Agreement programs as described in Rule Nos. 18, 22, 23, 24, 25, and Rule 14H Appendix II, respectively; WHEREAS, the Customer Battery Storage-Operator is, or shall be made, a party to the Underlying Agreement for purposes of its participation in the Scheduled Dispatch Program; and WHEREAS, this Agreement is contingent upon and supplements the Underlying Agreement which, as may be amended, shall continue in full force and effect notwithstanding the Customer Battery Storage-Operator's participation in the Company's Scheduled Dispatch Program pursuant to this Agreement;

HAWAIIAN ELECTRIC COMPANY, INC.
Docket No. 2019-0323, Decision and Order No. 38196 filed January 25, 2022. Transmittal Letter Dated February 4, 2022.

Company and the Customer Battery Storage-Operator hereby agree as follows:

NOW, THEREFORE, in consideration of the premises and the respective promises herein, the

- 1. <u>Notice and Disclaimer Regarding Future Rate and Tariff Modifications.</u> This Agreement shall, at all times, be subject to modification by the Commission as said Commission may, from time to time, direct in the exercise of its jurisdiction. Without limiting the foregoing, Customer Battery Storage-Operator expressly acknowledges the following:
 - The Emergency Demand Response Program and its associated Scheduled Dispatch Program are subject to modification by the Hawaii Public Utilities Commission ("Commission").
 - Your Agreement and the Battery Storage Facility shall be subject to any future
 modifications ordered by the Commission. Such modifications may positively or
 negatively impact any potential savings in your electricity bill that were
 calculated by you or presented to you to support your decision to buy or lease a
 Battery Storage Facility and may otherwise change the value of your Agreement
 and Battery Storage Facility. You agree to pay for any costs related to such
 Commission ordered modifications.

BY SIGNING BELOW, YOU ACKNOWLEDGE THAT YOU HAVE READ, UNDERSTAND AND AGREE TO THE ABOVE NOTICE AND DISCLAIMER. FURTHER, BY SIGNING BELOW, YOU CONFIRM YOUR UNDERSTANDING THAT ANY POTENTIAL SAVINGS IN YOUR ELECTRICITY BILL THAT WERE CALCULATED BY YOU OR PRESENTED TO YOU TO SUPPORT YOUR DECISION TO BUY OR LEASE A BATTERY STORAGE FACILITY MAY CHANGE.

2. <u>Effectiveness of Agreement.</u> This Agreement shall not be effective until approved and executed by each Party, i.e., upon the Effective Date. Customer Battery Storage-Operator shall not operate the Battery Storage Facility prior to approval and execution of this Agreement by the Company, except to the extent allowed for by the Underlying Agreement or to the extent necessary to obtain governmental and utility approvals. Until this Agreement is effective, no Party shall have any legal obligations that extend beyond the Underlying Agreement, arising hereunder, express or implied, and any actions taken by a Party in reliance on the terms of this Agreement prior to the Effective Date shall be at that Party's own risk.

- 3. <u>Underlying Interconnection Agreement.</u> Customer Battery Storage-Operator's Battery Storage Facility enrollment and participation under the Scheduled Dispatch Program is contingent upon current enrollment of the underlying Generating Facility in the Company's Net Energy Metering, Customer Self-Supply, Customer Grid-Supply, Customer Grid-Supply Plus, Smart Export, or Standard Interconnection Agreement programs as described in Rule Nos. 18, 22, 23, 24, 25, and execution and non-default of the Underlying Agreement. This Agreement shall supplement the Underlying Agreement which, as may be amended, shall continue in full force and effect notwithstanding the Customer Battery Storage-Operator's participation in the Company's Schedule Dispatch Program pursuant to this Agreement.
- 4. <u>SDP Tariff.</u> Unless otherwise provided herein, the terms and conditions governing Customer Battery Storage-Operator's participation in the Battery Bonus Program shall be as set forth in Company's SDP Tariff.
- 5. <u>Enrollment and Operation.</u> Customer Battery Storage-Operator hereby agrees to commit to the following capacity (kW) of maintained discharge from the Battery Storage Facility ("Committed Capacity") on a preset schedule for a daily duration of two hours.

Customer Battery Storage-Operator's Committed Capacity: k	Customer F	Battery Storage	-Operator's	Committed (Capacity:	k	W
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The daily two-hour period during which the Committed Capacity will be dispatched ("Dispatch Period") will be specified by the Company at the time of enrollment and may be revised by the Company with reasonable notice.

- a) Within 30 days of commencement of discharge of Committed Capacity, Customer Battery Storage-Operator must provide seven (7) consecutive days of operational performance data in five (5) minute intervals, if possible, or fifteen (15) minute intervals as necessary to verify the operation of the Battery Storage Facility in accordance with this Agreement. The Company shall complete such verification within 10 business days of the receipt of such performance data from Customer Battery Storage-Operator.
- b) If no reasonable requests for additional data or concerns are expressed regarding operation of the Battery Storage Facility as specified in this Agreement are communicated (in written or digital form) to the Customer Battery Storage-Operator by Company within 10 business day verification period, the Customer Battery Storage-Operator will be deemed verified as operating in compliance with this Agreement.
- a. Notwithstanding any other provision specified in the underlying program tariff in which the Customer Battery Storage-Operator participates or in the interconnection agreement to which the Customer Battery Storage-Operator is a party, as applicable, energy exported to the grid from the Battery Storage Facility during the Dispatch Period shall be permitted and, if applicable, compensated in accordance with the Customer Battery Storage-Operator's underlying program tariff, except that,

- i. Exports during the Dispatch Period from non-NEM customers will receive a "Dispatch Credit." The Dispatch Credit shall be indexed to the underlying retail rate, or the otherwise applicable rate at the time of export for TOU and other advanced rate design customers.
- ii. Until AMI is deployed for these customers and billing software upgrades are completed to facilitate the Dispatch Credit, non-NEM customers shall receive an Interim Dispatch Credit. The Interim Dispatch Credit shall be calculated as a fixed monthly credit that computes the difference between the export rate of customers' underlying interconnection tariff and the retail (or TOU) rate as follows:
- iii. Interim Dispatch Credit = (the sum of the Non-Fuel Energy Charges and all per-kWh charges, adjustments, and surcharges applicable to the customer's rate schedule using February 2022 rates, adjustments, and surcharges (\$/kWh) non-NEM DER tariff export rate (\$/kWh)) x Committed Capacity (kW) x 70% x 2 hours x 30 days. For this calculation the customer's rate schedule is the customer's rate schedule on the SDP Agreement execution date.
- iv. The Interim Dispatch Credit and Dispatch Credit, as applicable, will be zeroed out at the end of the year.
- v. Non-NEM customers shall receive the Interim Dispatch Credit and Dispatch Credit, as applicable, for the 10-year program duration.

- c) Energy discharged during the Dispatch Period from the Battery Storage Facility may either serve onsite load or be exported to the grid. Customer Battery Storage-Operator enrolled in Scheduled Dispatch is required to manage their DER systems to automatically prioritize battery charging during periods of substantial solar panel insolation in order to most reliably serve the two-hour battery discharge commitment as scheduled by the Company.
- d) Customer Battery Storage-Operator shall use the default ramp rate of equipment for the Committed Capacity during the Dispatch Period. Deviations from the default ramp rate may be required in certain circumstances where the default ramp rate may pose adverse impacts to grid power quality. The Company will notify the Customer Battery Storage-Operator of any such deviation when the Dispatch Period is specified or revised.
- 6. Term and Termination. This Agreement shall continue for ten (10) years from the commencement of the discharge of Committed Capacity for the Dispatch Period in accordance with this Agreement. Customer Battery Storage-Operator may terminate this Agreement at any time with sixty (60) days written notice. If termination occurs prior to completion of its ten-year commitment. Customer Battery Storage-Operator shall return a prorated portion of the compensation received pursuant to the SDR Tariff. The prorated portion of the compensation shall be based on the remaining portion of the ten-year commitment, calculated from the date of termination as a fraction of the Customer Battery Storage-Operator's ten-year commitment. Customer Battery Storage-Operator may either pay such owed amount in full or make other arrangements with the Company prior to termination. The Company will not charge interest on a payment if final payment is made within one year of date of termination. Company may terminate this Agreement at any time if Customer Battery-Storage Operator fails to comply with any term of this Agreement, the Underlying Agreement, or if the Customer Battery-Storage Operator fails to be an Eligible Customer Battery-Storage Operator.
- 7. Failure to Perform. If the Company identifies concerns or issues relating to the Battery Storage Facility's performance, including, without limitation, potential non-compliance with this Rule pertaining to the discharge of Committed Capacity for the Discharge Period, the Company may conduct a performance audit to monitor and document conditions.

- a) The Company shall provide the Customer Battery Storage-Operator written or digital notice at least seven (7) days in advance of any performance audit.
- b) Customer Battery Storage-Operator shall be required to provide five (5) minute interval data, if possible, fifteen (15) minute intervals as necessary to verify operation of the Battery Storage Facility in accordance with this Agreement with five (5) business days of request from Company.

- c) If the Battery Storage Facility fails to perform in compliance with this Rule, the Company will provide to the Customer Battery Storage-Operator a written notice of Failure to Perform, which will include documentation explaining the non-compliance of operation.
- d) Customer Battery Storage-Operator will have 30 days from the date of such notice of Failure to Perform to cure the non-compliance. The Eligible Customer Battery Storage Operator may request a reasonable extension of the cure period for good cause shown, for which the Company shall not unreasonably withhold.
- e) If the non-compliance persists beyond the applicable cure period, Customer Battery Storage-Operator (recipient of the one-time Incentive Payment, Monthly Peak Capacity Payment and Monthly fixed export credit (as applicable)) will not receive the monthly payments and may be charged up to \$150 monthly until either the non-compliance is rectified or the Company has recovered the full prorated compensation paid to Customer Battery Storage-Operator pursuant to the SDR Tariff.
- 8. <u>Scope of Agreement.</u> The Parties understand and agree that this Agreement is contingent upon the Underlying Agreement and applies only to the operation of Customer Battery Storage-Operator's Battery Storage Facility as specified by the Scheduled Dispatch Program.
- 9. Metering. Within fifteen (15) days of execution of this Agreement, the Company will supply, own, and maintain all necessary meters and associated equipment utilized for billing and energy purchase. The meters will be tested and read in accordance with the rules of the Commission and the Company. The Customer Battery Storage-Operator at its expense, shall provide, install and maintain all conductors, service switches, fuses, meter sockets, meter instrument transformer housing and mountings, switchboard meter test buses, meter panels and similar devices required for service connection and meter installations on the Customer Battery Storage-Operator's premises in accordance with the Company's Rule 14H.
- 10. <u>Compensation.</u> The terms regarding compensation to the Customer Battery System-Operator for its participation in the Company's Scheduled Dispatch Program shall be as set forth in the SDR Tariff. If the battery system operator and owner of the battery facility are the same and has an account with Hawaiian Electric, that individual or entity must sign the Battery Bonus Program agreement.
- 11. <u>Data and Private Information.</u> Company access to personal data, including information for tax reporting purposes, data related to the Battery Storage Facility performance and usage, electrical utility account information, usage history, and meter data is required for enrollment under the Company's Scheduled Dispatch Program. All data access, use, and sharing is subject to the terms of Hawaiian Electric's Customer Information Privacy Policy (available at https://www.hawaiianelectric.com/privacy-notice/customer-information-privacy-policy) and applicable law.
 - a) By executing this Agreement, Customer Battery Storage-Operator approves and consents to provide data required for enrollment under Scheduled Dispatch Program.

Revised Sheet No. 49.31-E Effective March 1, 2022

b) Tax Identification Number ("TIN") must be provided to Company via secure transfer prior to the Company executing this Agreement.

12. <u>Indemnification</u>.

a) The Customer Battery Storage-Operator shall indemnify, defend and hold harmless the Company and its officers, directors, agents and employees, from and against all liabilities, damages, losses, fines, penalties, claims, demands, suits, costs and expenses (including reasonable attorney's fees and expenses) to or by third persons, including the Company's employees or subcontractors, for injury or death, or for injury to property, arising out of the actions or inactions of the Customer Battery Storage-Operator (or those of anyone under its control or on its behalf) with respect to its obligations under this Agreement, and/or arising out of the installation, operation and maintenance of the Battery Storage Facility, except to the extent that such injury, death or damage is attributable to the gross negligence or intentional act or omission of the Company or its officers, directors, agents or employees.

Provided, however, where the Customer Battery Storage-Operator is an agency of the United States, the following Section shall be applicable in place of Paragraph 12(a):

"The United States understands that it may be held liable for loss, damages expense and liability to third persons and injury to or death of persons or injury to property caused by the United States in its engineering design, construction ownership or operations of, or the making of replacements, additions betterment to, or by failure of, any of such party's works or facilities used in connection with this Agreement to the extent allowed by the Federal Tort Claims Act 28 U.S.C. § 2671 et seq. and the Agreement Disputes Act of 1978, 41 U.S.C. §§ 601-613.

Company shall be responsible for damages or injury caused by Company, Company's agents, officers, and employees in the course of their employment to the extent permitted by law."

Provided, however, where the Customer Battery Storage-Operator is an agency of the State of Hawaii (the "State"), the following Section shall be applicable in place of Paragraph 12(a):

"The State shall be responsible for damages or injury caused by the State's agents, officers, and employees in the course of their employment to the extent that the State's liability for such damage or injury has been determined by a court or otherwise agreed to by the State. The State shall pay for such damage and injury to the extent permitted by law. The State shall use reasonable good faith efforts to pursue any approvals from the Legislature and the Governor that may be required to obtain the funding necessary to enable the State to perform its obligations or cover its liabilities hereunder. The State shall not request Company to indemnify the State for, or hold the State harmless from, any claims for such damages or injury.

Company shall be responsible for damages or injury caused by Company, Company's agents, officers, and employees in the course of their employment to the extent that Company's liability for such damage or injury has been determined by a court or otherwise agreed to by Company, and Company shall pay for such damage and injury to the extent permitted by law. Company shall not request the State to indemnify Company for, or hold Company harmless from, any claims for such damages or injury."

- b) The Company shall indemnify, defend and hold harmless the Customer Battery Storage-Operator, and its officers, directors, agents and employees, from and against all liabilities, damages, losses, fines, penalties, claims, demands, suits, costs and expenses (including reasonable attorney's fees and expenses) to or by third persons, including the Customer Battery Storage-Operator's employees or subcontractors, for injury or death, or for injury to property, arising out of the actions or inactions of the Company (or those of anyone under its control or on its behalf) with respect to its obligations under this Agreement, except to the extent that such injury, death or damage is attributable to the gross negligence or intentional act or omission of the Customer Battery Storage-Operator or its officers, directors, agents or employees.
- c) Nothing in this Agreement shall create any duty to, any standard of care with reference to, or any liability to any person not a party to it.

- 13. <u>Limitation of Liability</u>. Neither by inspection, if any, or non-rejection, nor in any other way, does the Company give any warranty, express or implied, as to the adequacy, safety, or other characteristics of any structures, equipment, wires, appliances or devices owned, installed or maintained by the Customer Battery Storage-Operator, including without limitation the Battery Storage Facility and any structures, equipment, wires, appliances or devices appurtenant thereto.
- Force Majeure. For purposes of this Agreement, "Force Majeure Event" means any 14. event: (a) that is beyond the reasonable control of the affected Party; and (b) that the affected Party is unable to prevent or provide against by exercising reasonable diligence, including the following events or circumstances, but only to the extent they satisfy the preceding requirements: (a) acts of war, public disorder, insurrection or rebellion; floods, hurricanes, earthquakes, lighting, storms, and other natural calamities; explosions or fires; strikes, work stoppages, or labor disputes; embargoes; and sabotage. If a Force Majeure Event prevents a Party from fulfilling any obligations under this Agreement, such Party will promptly notify the other Parties in writing and will keep the other Parties informed on a continuing basis of the scope and duration of the Force Majeure Event. The affected Party will specify in reasonable detail the circumstances of the Force Majeure Event, its expected duration, and the steps that the affected Party is taking to mitigate the effects of the event on its performance. The affected Party will be entitled to suspend or modify its performance of obligations under this Agreement, other than the obligation to make payments then due or becoming due under this Agreement, but only to the extent that the effect of the Force Majeure Event cannot be mitigated by the use of reasonable efforts. The affected Party will use reasonable efforts to resume its performance as soon as possible.
- 15. Additional Information. By signing this Agreement, the Customer Battery Storage-Operator expressly agrees and authorizes Company to (1) request and obtain additional information from Customer Battery Storage-Operator relating to the Battery Storage Facility, and/or (2) make modifications to the Customer Battery Storage-Operator's Battery Storage Facility, at no cost to the Company, where reasonably necessary, to serve the Customer Battery Storage-Operator under this Agreement or to ensure reliability, safety of operation, and power quality of the Company's system.
- 16. Notices. Any notice required under this Agreement shall be in writing and mailed at any United States Post Office with postage prepaid and addressed to the Party, or personally delivered to the Party at the address identified on the last page of the Agreement. Changes in such designation may be made by notice similarly given. Notice sent by mail shall be deemed to have been given on the date of actual delivery or at the expiration of the fifth day after the date of mailing, whichever is earlier.

17. Miscellaneous.

- a) Governing Law and Regulatory Authority. This Agreement was executed in the State of Hawaii and must in all respects be interpreted, governed, and construed under the laws of the State of Hawaii. This Agreement is subject to, and the Parties' obligations hereunder include, operating in full compliance with all valid, applicable federal, state, and local laws or ordinances, and all applicable rules, regulations, orders of, and tariffs approved by, duly constituted regulatory authorities having jurisdiction.
- b) Amendment, Modifications, or Waiver. This Agreement may not be altered or modified by any of the Parties, except by an instrument in writing executed by each of them. None of the provisions of this Agreement shall be considered waived by a Party unless such waiver is given in writing. The failure of a Party to insist in any one or more instances upon strict performance of any of the provisions of this Agreement or to take advantage of any of its rights hereunder shall not be construed as a waiver of any such provisions or the relinquishment of any such rights for the future, but the same shall continue and remain in full force and effect. This Agreement contains the entire agreement and understanding between the Parties, their agents, and employees as to the subject matter of this Agreement. Each Party also represents that in entering into this Agreement, it has not relied on any promise, inducement, representation, warranty, agreement or other statement not set forth in this Agreement.
- c) <u>Assignment.</u> This Agreement may not be assigned by any Party without the prior written consent of the other Parties. Such consent shall not be unreasonably withheld.
- d) <u>Binding Effect.</u> This Agreement shall be binding upon and inure to the benefit of the Parties hereto and their respective successors, legal representatives, and permitted assigns.
- e) Relationship of Parties. Nothing in this Agreement shall be deemed to constitute any Party hereto as partner, agent or representative of the other Parties or to create any fiduciary relationship between the Parties.
- f) <u>Limitations</u>. Nothing in this Agreement shall limit the Company's ability to exercise its rights or expand or diminish its liability with respect to the provision of electrical service pursuant to the Company's tariffs as filed with the Commission, or the Commission's Standards for Electric Utility Service in the State of Hawaii, which currently are included in the Commission's General Order Number 7, as either may be amended from time to time.

g) Execution of Agreement; Multiple Counterparts. This Agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument binding all Parties notwithstanding that all of the Parties are not signatories to the same counterparts. Signatures may be provided in original ("wet") form or by other means intended to preserve the original graphic and pictorial appearance of the signature, such as a photocopy. A copy of a Party's signature shall be considered an "original" signature for purposes of this Agreement.

Revised Sheet No. 49.31-K Effective March 1, 2022

IN WITNESS WHEREOF, the Parties hereto have caused two originals of this Agreement to be executed by their duly authorized representatives. This Agreement is effective as of the date first set forth above.

CUSTOMER BATTERY STORAGE-OPERATOR

	Date
_	To be completed by Company Date
To be completed by Company	
_ To be completed by Company	
	To be completed by Company

MAILING ADDRESS

Hawaiian Electric Company
Distributed Energy Resources Division
P.O. Box 2750 (AT10-SE)
Honolulu, HI 96840
HAWAIIAN ELECTRIC COMPANY, INC.
Order No.

Hawaiian Electric Company, Inc.

Exhibit 5
DER Parties' Proposed Revisions to
Rule No. 31
and
Rule No. 31 Appendix A

(Blacklined Version)

Superseding Revised Sheet No. 49.30-A Effective July 9, 2021

Revised Sheet No. 49.30-A Effective March 1, 2022

Rule No. 31

Emergency Demand Response Program Rider: Scheduled Dispatch Program

AVAILABILITY FOR CUSTOMER BATTERY STORAGE-OPERATORS

Emergency Demand Response Program participation is available to new and existing Eligible Customer Battery Storage-Operators who own and operate a battery storage system charged from an Eligible Customer-Generator's owned or leased Generating Facility under the Company's Net Energy Metering ("NEM"), Customer Self-Supply, Customer Grid-Supply, Customer Grid-Supply Plus, Smart Export, or Standard Interconnection Agreement programs as described in Rule Nos. 18, 22, 23, 24, 25, and Rule 14H Appendix II, respectively ("Battery Storage Facility").

HAWAIIAN ELECTRIC COMPANY, INC.

Revised Sheet No. 49.30-B Effective March 1, 2022

Rule No. 31

Emergency Demand Response Program Rider: Scheduled Dispatch Program

A. AVAILABILITY

Scheduled Dispatch Program ("SDP" or "Battery Bonus Program") participation is available to new and existing Eligible Customer Battery Storage-Operators who own and operate a battery storage system charged from an Eligible Customer-Generator's owned or leased Generating Facility under the Company's Net Energy Metering, Customer Self-Supply, Customer Grid-Supply, Customer Grid-Supply Plus, Smart Export, or Standard Interconnection Agreement programs as described in Rule Nos. 18, 22, 23, 24, 25, and Rule 14H Appendix II, respectively ("Battery Storage Facility") where:

- Eligible Customer Battery Storage-Operators execute the Scheduled Dispatch Program
 Agreement, provided as Appendix A of this Rule ("SDP Agreement"), memorializing
 their participation in the Battery Bonus Program and specifying the Committed Capacity
 (defined below) of their Battery Storage Facility,
- 2. Eligible Customer Battery Storage-Operators may add additional post inverter alternating current generation capacity¹ in coordination with their battery installation by submitting an amendment to the interconnection agreement governing the underlying Generating Facility ("SDP Amendment"); provided, however, that for additional post inverter alternating current generation capacity in excess of 5 kVA, such Generation Facility addition must be limited to no more than twice the capacity of the Battery Storage Facility.
- 3. If the Eligible Customer Battery Storage-Operator is not a party to the interconnection agreement governing the underlying Generating Facility (e.g., as the "Customer-Generator" or the "Owner/Operator"), the SDP Amendment shall make the Eligible Customer Battery Storage-Operator an additional party to such interconnection agreement with respect to the Battery Storage Facility and any generation capacity added to the underlying Generating Facility subject to the limitations of this Rule, and
- 4. Participation in the Battery Bonus Program does not inhibit Eligible Customer Battery Storage-Operators from fulfilling performance commitments of other grid services and demand response options, if dual participation is feasible.

B. ENROLLMENT

 SDP will begin enrollment on July 1, 2021 and enrollment will be available until total enrolled SDP capacity reaches 50 megawatts ("MW") or until June 20, 2023, whichever comes first, unless otherwise ordered by the Commission.

¹ As referenced herein, "post inverter alternating current generation capacity" refers to the power measured at the alternating current output terminals of the inverter.

Rule No. 31

Emergency Demand Response Program

Rider: Scheduled Dispatch Program

- 2. Enrollment in SDP is a ten-year commitment comprised of an initial phase ending for all participants on December 31, 2023 and a final phase commencing on January 1, 2024 and continuing for the remainder of the Eligible Customer Battery Storage-Operator's ten-year commitment. During the final phase of their ten-year commitment, each Eligible Customer Battery Storage-Operator will have the option to (a) continue operating their Battery Storage Facility under the SDP pursuant to this Rule or (b) transition to an alternative dispatch program upon meeting the applicable eligibility requirements for such alternative program.
- 3. The Eligible Customer Battery Storage-Operator's ten-year commitment under this Rule begins on the Battery Storage Facility's operational date, which is the first day (of the seven consecutive days) the Eligible Customer Battery Storage-Operator provides operational performance data of the Battery Storage Facility in connection with, and meeting the requirements of, the verification process outlined in section B.4 below.
- 4. To complete the enrollment process of executing the SDP Agreement, the Eligible Customer Battery Storage-Operator shall provide:
 - a. A complete validation package as required by Rule 14H,
 - A completed SDP Amendment, signed by the Eligible Customer Battery-Storage Operator (with the Company's countersignature of the SDP Amendment to be provided no later than 10 business days after the validation package has been approved by the Company),
 - c. A completed SDP Agreement, signed by the Eligible Customer Battery Storage-Operator (with the Company's countersignature of the SDP Agreement to be provided no later than 5 business days after all the requirements of this section B.4 are met).
 - d. Operational proof of start time and discharge of 2-hour duration of the Battery Storage Facility.
 - e. Federal tax form W-9 ("Form W-9"), and
 - f. Seven (7) consecutive days of operational performance data in five (5) minute intervals, if possible, or fifteen (15) minute intervals as necessary for the Company to verify the Battery Storage Facility discharges the Committed Capacity for the Dispatch Period in compliance with this Rule. The Company shall be required to complete such verification within 10 business days of the receipt of such performance data from Eligible Customer Battery Storage-Operator.
 - g. If no reasonable requests for additional data or concerns are expressed regarding the Committed Capacity or operation of the Battery Storage Facility as specified in section C of this Rule are communicated (in written or digital form) to the Eligible Customer Battery Storage-Operator by the Company within the 10 business day verification period described in section B.4.f, the Eligible Customer Battery Storage-Operator will be deemed verified as operating in compliance with this Rule.

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Sheet No. 49.30-C.1 Effective March 1, 2022

Rule No. 31

Emergency Demand Response Program Rider: Scheduled Dispatch Program

C. OPERATION

1. The Eligible Customer Battery Storage-Operator shall specify in its SDP Agreement the capacity level (kW) at which they commit to maintain the discharge level from their Battery Storage Facility ("Committed Capacity") for a duration of two consecutive hours each day ("Dispatch Period"). The Dispatch Period will be specified by the Company at the time of enrollment and may be revised by the Company upon written notice to the Eligible Customer Battery Storage-Operator; provided that the Eligible Customer Battery Storage-Operator shall have six months from the date of such written notice to implement such revision.

Superseding Revised Sheet No. 49.30-D Effective July 9, 2021

Revised Sheet No. 49.30-D Effective March 1, 2022

Rule No. 31

Emergency Demand Response Program Rider: Scheduled Dispatch Program

- 2. Energy discharged during the Dispatch Period from the Battery Storage Facility may either serve onsite load or be exported to the grid. The Eligible Customer Battery Storage-Operator shall be required to manage their Battery Storage Facility to automatically prioritize battery charging during periods of substantial solar panel insolation in order to most reliably serve the two-hour battery discharge commitment as scheduled by the Company.
- 3. Notwithstanding any other provision specified in the underlying Generating Facility's governing program tariff or in the interconnection agreement to which the Eligible Customer Battery Storage-Operator is a party (or is made a party as provided under this Rule), as applicable, energy exported to the grid from the Battery Storage Facility for the Battery Bonus Program during the Dispatch Period is permitted and, if applicable, compensated in accordance with the underlying Generating Facility's governing program tariff, except that:
 - a. Exports during the Dispatch Period from non-NEM customers will receive a "Dispatch Credit." The Dispatch Credit shall be indexed to the underlying retail rate, or the otherwise applicable rate at the time of export for TOU and other advanced rate design customers.
 - b. Until AMI is deployed for these customers and billing software upgrades are completed to facilitate the Dispatch Credit, non-NEM customers shall receive an Interim Dispatch Credit. The Interim Dispatch Credit shall be calculated as a fixed monthly credit that computes the difference between the export rate of customers' underlying interconnection tariff and the retail (or TOU) rate as follows:
 - c. Interim Dispatch Credit = (the sum of the Non-Fuel Energy Charges and all perkWh charges, adjustments, and surcharges applicable to the customer's rate schedule using February 2022 rates, adjustments, and surcharges (\$/kWh) non-NEM DER tariff export rate (\$/kWh)) x Committed Capacity (kW) x 70% x 2 hours x 30 days. For this calculation the customer's rate schedule is the customer's rate schedule on the SDP Agreement execution date.
 - d. The Interim Dispatch Credit and Dispatch Credit, as applicable, will be zeroed out at the end of the year.
 - e. Non-NEM customers shall receive the Interim Dispatch Credit and Dispatch Credit, as applicable, for the 10-year program duration.
- 4. In the event that solar insolation is insufficient to allow the Battery Storage Facility to meet the SDP requirement of providing the Committed Capacity for the Dispatch Period, the Eligible Customer Battery Storage-Operator will still be deemed to be in compliance with such requirement, provided the Battery Storage Facility is paired with a Generating Facility with a ratio of at least 1 kW of generation for every 2 kWh of Committed Capacity, as identified in the SDP Agreement.
- All participating systems shall have Volt-Watt activation for the term of the project and meet current Advanced Inverter setting requirements.

HAWAIIAN ELECTRIC COMPANY, INC.

Docket No. 2019-0323, Decision and Order No. 38196 filed January 25, 2022. Transmittal Letter Dated February 4, 2022.

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After the first year, Company reserves
the right to adjust the 70% factor in the fixed monthly
export credit equation upon delivery of supported
documentation to justify a different rate.
Participants participating in Grid Service Purchase
Agreement and not Battery Bonus Program are also
eligible to receive this 3-year fixed monthly export
credit. ...

Superseding Revised Sheet No. 49.30-D Effective July 9, 2021

Revised Sheet No. 49.30-D Effective March 1, 2022

Rule No. 31

Emergency Demand Response Program Rider: Scheduled Dispatch Program

6. Eligible Customer Battery Storage-Operator shall use the default ramp rate of equipment for the Committed Capacity during the Dispatch Period. Deviations from the default ramp rate may be required in certain circumstances where the default ramp rate may pose adverse impacts to grid power quality. The Company will notify the Eligible Customer Battery Storage-Operator of any such deviation when the Dispatch Period is specified or revised as described in Section C.1.

HAWAIIAN ELECTRIC COMPANY, INC.

Sheet No. 49.30-D.1 Effective March 1, 2022

Rule No. 31

Emergency Demand Response Program Rider: Scheduled Dispatch Program

D. COMPENSATION

Participation in the Battery Bonus Program shall be compensated by a one-time <u>upfront</u> incentive payment ("Incentive Payment") based on the Battery Storage Facility's demonstrated Committed Capacity for the Dispatch Period in accordance with this Rule. The Incentive Payment shall be determined as of the SDP Amendment approval date pursuant to the table below:

Total SDP Committed Capacity MW	Incentive Payment Rate
First 15 MW	\$850/kW of Committed Capacity
Next 15 MW	\$750/kW of Committed Capacity
Next 20 MW (not to exceed 50 MW in total)	\$500/kW of Committed Capacity

Superseding Revised Sheet No. 49.30-E Effective July 9, 2021

Revised Sheet No. 49.30-E Effective March 1, 2022

Rule No. 31

Emergency Demand Response Program Rider: Scheduled Dispatch Program

- 2. In addition to the Incentive Payment, the utility customer of record will receive a monthly peak capacity incentive of \$5/kW x Committed Capacity ("Monthly Peak Capacity Payment") for the duration of the 10-year enrollment period. The Monthly Peak Capacity Payment shall be reflected as a bill credit on the customer's bill. The Company shall issue a check to the customer of record in January of the following year for any Monthly Peak Capacity Payment bill credits remaining at the end of the annual period. Customers that enrolled prior to May 1, 2022 will begin receiving the Monthly Peak Capacity Payment on their bill starting May 1, 2022. All other customers will receive this bill credit starting in the month following the customer's enrollment date, prorated as applicable.
- 3. The Eligible Customer Battery Storage-Operator must demonstrate compliance as described section B.3 with this Rule prior to receiving the Incentive Payment.
- 4. The Incentive Payment will be paid in full within 30 days of the SDP Agreement execution date. Payments shall be made directly to the owner of the Battery Storage Facility as identified in the SDP Agreement.
- 5. If the Eligible Customer Battery Storage-Operator does not operationalize its conditionally approved Battery Storage Facility by December 31, 2023, the Company will void the conditional approval to install and therefore will not owe the Eligible Customer Battery Storage-Operator any Incentive Payment or the Monthly Peak Capacity Payment.

E. FAILURE TO PERFORM

If the Company identifies concerns or issues relating to the Battery Storage Facility's performance, including, without limitation, potential non-compliance with this Rule pertaining to the discharge of Committed Capacity for the Discharge Period, the Company may conduct a performance audit to monitor and document conditions.

- 1. The Company shall provide the Eligible Customer Battery Storage-Operator written or digital notice at least seven (7) days in advance of any performance audit.
- Eligible Customer Battery Storage-Operators are required to provide five (5) minute interval data, if possible, or fifteen (15) minute interval data as necessary to verify operation of Battery Storage Facility as specified in section C of this Rule within 5 business days of request from Company.
- 3. If the Battery Storage Facility fails to perform in compliance with this Rule, the Company will provide to the Eligible Customer Battery Storage-Operator a written notice of Failure to Perform, which will include documentation explaining the non-compliance of operation. The Eligible Customer Battery Storage-Operator will have 30 days from the date of such notice of Failure to Perform to cure the non-

HAWAIIAN ELECTRIC COMPANY, INC.

Docket No. 2019-0323, Decision and Order No. 38196 filed January 25, 2022. Transmittal Letter Dated February 4, 2022.

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Eligible Customer Battery Storage-Operators, as an additional incentive reflected on their utility bill, will receive a monthly peak capacity incentive (\$5/kW x Committed Capacity) ("Monthly Peak Capacity Payment") for 10-year period from enrollment....

Superseding Revised Sheet No. 49.30-E Effective July 9, 2021

Revised Sheet No. 49.30-E Effective March 1, 2022

Rule No. 31

Emergency Demand Response Program

Rider: Scheduled Dispatch Program

compliance. The Eligible Customer Battery Storage Operator may request a reasonable extension of the cure period for good cause shown, for which the Company shall not unreasonably withhold.

4. If the non-compliance persists beyond the applicable cure period, the Eligible Customer Battery Storage-Operator (or recipient of the one-time Incentive Payment, Monthly Peak Capacity Payment and Monthly fixed export credit (as applicable)) will not receive the monthly payments and may be charged up to \$150 monthly until either the non-compliance is rectified or the Company has recovered the full prorated Incentive Payment amount.

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HAWAIIAN ELECTRIC COMPANY, INC.

Superseding Revised Sheet No. 49.30-F Effective July 9, 2021

Revised Sheet No. 49.30-F Effective March 1, 2022

Rule No. 31

Emergency Demand Response Program

Rider: Scheduled Dispatch Program

5. If the non-compliance continues for a duration of 12 months, the Company will automatically terminate the customer, and will seek a repayment of the Incentive Payment amount, prorated from the commencement of noncompliance date. If the Eligible Customer Battery Storage-Operator's repayment of such prorated amount is not promptly made in a single lump sum payment, the Eligible Customer Battery Storage-Operator's repayment of such prorated amount shall be made in 12 equal monthly installments to the Company.

F. TERMINATION

- Notwithstanding their ten-year commitment under this Rule, the Eligible Customer Battery Storage-Operator may terminate, or a new account holder may assume, their SDP Agreement with written or digital notice provided 60 days prior to date of termination or assumption.
- If termination occurs prior to the completion of the ten-year commitment, the Eligible Customer Battery Storage-Operator must transfer the system to an available DER Tariff through an amendment. Such Battery Storage Facility must remain non-operational until such time as it is transferred to an alternative tariff.
- 3. If termination occurs prior to completion of the ten-year commitment, the Eligible Customer Battery Storage-Operator shall return a prorated portion of the Incentive Payment received. The prorated portion shall be based on the remaining portion of the ten-year commitment, calculated from the date of termination as a fraction of the Eligible Customer Battery Storage-Operator's ten-year commitment.
- 4. The Company will bill the prorated amount to the Eligible Customer Battery Storage-Operator. If the Eligible Customer Battery Storage-Operator's return of such prorated amount is not promptly made in a single lump sum payment, the Eligible Customer Battery Storage-Operator's return of such prorated amount shall be made in twelve equal monthly installments. The Company will not charge interest on a payment if final payment is made within one year of date of termination. Eligible Customer Battery Storage-Operators that are not direct customers must pay prorated amount in full. If the Eligible Customer Battery Storage-Operator decides to terminate their SDP Agreement during a non-compliance period, the non-compliance charges imposed pursuant to section E.5 and paid by the Eligible Customer Battery Storage-Operator will be applied towards the prorated Incentive Amount required to be returned by the Eligible Customer Battery Storage-Operator.

Deleted: remove the Battery Storage Facility, including associated solar panels, or transfer the same

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HAWAIIAN ELECTRIC COMPANY, INC.

Docket No. 2019-0323, Decision and Order No. 38196 filed January 25, 2022. Transmittal Letter Dated February 4, 2022.

Sheet No. 49.30-G Effective March 1, 2022

Rule No. 31

Emergency Demand Response Program Rider: Scheduled Dispatch Program

G. METERING AND BILLING

- The Company will supply, install, own, and maintain all necessary meters and associated equipment utilized for billing, energy purchase, and performance auditing. The meters will be tested and read in accordance with the rules of the Commission and the Company.
- Energy exported to the grid from the Battery Storage Facility will be compensated at applicable Energy Credit Rates for the Eligible Customer Battery Storage-Operator, as specified in the underlying Generating Facility's governing program tariff<u>or as</u> otherwise provided in this Rule 31.
- 3. All rates, terms, and conditions from the applicable rate schedule will apply, as modified by the applicable program tariff, if applicable.

APPENDIX A

BATTERY BONUS PROGRAM AGREEMENT

This Scheduled Dispatch Program or Battery Bonus Program Agreement ("Agreement") is made by and between:
Hawaiian Electric Company, Inc. ("Company") and
Operator") ("Customer Battery Storage-
and is made, effective and binding as of ("Effective Date")
The Company and the Customer Battery Storage-Operator may each be referred to individually as a "Party" and collectively as the "Parties."
WHEREAS, Company is an operating electric public utility subject to the Hawaii Public Utilities Law, Hawaii Revised Statutes, Chapter 269, and the rules and regulations of the Hawaii Public Utilities Commission ("Commission");
WHEREAS , the Customer Battery Storage-Operator qualifies as an "Eligible Customer Battery Storage-Operator," as defined in the Company's Emergency Demand Response Program tariff and its associated Scheduled Dispatch Program Rider ("SDP Tariff");
WHEREAS, the Customer Battery Storage-Operator intends to own and operate a battery storage system charged from an Eligible Customer-Generator's owned or leased Generating Facility governed by the Underlying Agreement, defined below, pursuant to the requirements of the Scheduled Dispatch Program ("Battery Storage Facility");
WHEREAS, the underlying Generating Facility that will charge the Battery Storage Facility is governed by an interconnection agreement with the Company dated ("Underlying Agreement") under the Company's Net Energy Metering ("NEM"), Customer Self-Supply, Customer Grid-Supply, Customer Grid-Supply Plus, Smart Export, or Standard Interconnection Agreement programs as described in Rule Nos. 18, 22, 23, 24, 25, and Rule 14H Appendix II, respectively;
WHEREAS, the Customer Battery Storage-Operator is, or shall be made, a party to the Underlying Agreement for purposes of its participation in the Scheduled Dispatch Program; and
WHEREAS, this Agreement is contingent upon and supplements the Underlying Agreement which, as may be amended, shall continue in full force and effect notwithstanding the Customer Battery Storage-Operator's participation in the Company's Scheduled Dispatch Program pursuant to this Agreement;
NOW, THEREFORE, in consideration of the premises and the respective promises herein, the Company and the Customer Battery Storage-Operator hereby agree as follows: HAWAIIAN ELECTRIC COMPANY, INC. Docket No. 2019-0323, Decision and Order No. 38196 filed January 25, 2022. Transmittal Letter Dated February 4, 2022.

- Notice and Disclaimer Regarding Future Rate and Tariff Modifications. This
 Agreement shall, at all times, be subject to modification by the Commission as said
 Commission may, from time to time, direct in the exercise of its jurisdiction. Without
 limiting the foregoing, Customer Battery Storage-Operator expressly acknowledges the
 following:
 - The Emergency Demand Response Program and its associated Scheduled Dispatch Program are subject to modification by the Hawaii Public Utilities Commission ("Commission").
 - Your Agreement and the Battery Storage Facility shall be subject to any future
 modifications ordered by the Commission. Such modifications may positively or
 negatively impact any potential savings in your electricity bill that were
 calculated by you or presented to you to support your decision to buy or lease a
 Battery Storage Facility and may otherwise change the value of your Agreement
 and Battery Storage Facility. You agree to pay for any costs related to such
 Commission ordered modifications.

BY SIGNING BELOW, YOU ACKNOWLEDGE THAT YOU HAVE READ, UNDERSTAND AND AGREE TO THE ABOVE NOTICE AND DISCLAIMER. FURTHER, BY SIGNING BELOW, YOU CONFIRM YOUR UNDERSTANDING THAT ANY POTENTIAL SAVINGS IN YOUR ELECTRICITY BILL THAT WERE CALCULATED BY YOU OR PRESENTED TO YOU TO SUPPORT YOUR DECISION TO BUY OR LEASE A BATTERY STORAGE FACILITY MAY CHANGE.

2. <u>Effectiveness of Agreement.</u> This Agreement shall not be effective until approved and executed by each Party, i.e., upon the Effective Date. Customer Battery Storage-Operator shall not operate the Battery Storage Facility prior to approval and execution of this Agreement by the Company, except to the extent allowed for by the Underlying Agreement or to the extent necessary to obtain governmental and utility approvals. Until this Agreement is effective, no Party shall have any legal obligations that extend beyond the Underlying Agreement, arising hereunder, express or implied, and any actions taken by a Party in reliance on the terms of this Agreement prior to the Effective Date shall be at that Party's own risk.

Revised Sheet No. 49.31-C Effective March 1, 2022

- 3. <u>Underlying Interconnection Agreement.</u> Customer Battery Storage-Operator's Battery Storage Facility enrollment and participation under the Scheduled Dispatch Program is contingent upon current enrollment of the underlying Generating Facility in the Company's Net Energy Metering, Customer Self-Supply, Customer Grid-Supply, Customer Grid-Supply Plus, Smart Export, or Standard Interconnection Agreement programs as described in Rule Nos. 18, 22, 23, 24, 25, and execution and non-default of the Underlying Agreement. This Agreement shall supplement the Underlying Agreement which, as may be amended, shall continue in full force and effect notwithstanding the Customer Battery Storage-Operator's participation in the Company's Schedule Dispatch Program pursuant to this Agreement.
- SDP Tariff. Unless otherwise provided herein, the terms and conditions governing Customer Battery Storage-Operator's participation in the Battery Bonus Program shall be as set forth in Company's SDP Tariff.
- 5. <u>Enrollment and Operation.</u> Customer Battery Storage-Operator hereby agrees to commit to the following capacity (kW) of maintained discharge from the Battery Storage Facility ("Committed Capacity") on a preset schedule for a daily duration of two hours.

Customer	Battery	Storage-0	Operator's	Committed	Capacity	- 1	κW

The daily two-hour period during which the Committed Capacity will be dispatched ("Dispatch Period") will be specified by the Company at the time of enrollment and may be revised by the Company with reasonable notice.

- a) Within 30 days of commencement of discharge of Committed Capacity, Customer Battery Storage-Operator must provide seven (7) consecutive days of operational performance data in five (5) minute intervals, if possible, or fifteen (15) minute intervals as necessary to verify the operation of the Battery Storage Facility in accordance with this Agreement. The Company shall complete such verification within 10 business days of the receipt of such performance data from Customer Battery Storage-Operator.
- b) If no reasonable requests for additional data or concerns are expressed regarding operation of the Battery Storage Facility as specified in this Agreement are communicated (in written or digital form) to the Customer Battery Storage-Operator by Company within 10 business day verification period, the Customer Battery Storage-Operator will be deemed verified as operating in compliance with this Agreement.
- a. Notwithstanding any other provision specified in the underlying program tariff in which the Customer Battery Storage-Operator participates or in the interconnection agreement to which the Customer Battery Storage-Operator is a party, as applicable, energy exported to the grid from the Battery Storage Facility during the Dispatch Period shall be permitted and, if applicable, compensated in accordance with the Customer Battery Storage-Operator's underlying program tariff, except that.

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Section Break (Next Page)

Superseding Revised Sheet No. 49.31-C Effective July 9, 2021

Revised Sheet No. 49.31-C Effective March 1, 2022

i. Exports during the Dispatch Period from non-NEM customers will receive a "Dispatch Credit." The Dispatch Credit shall be indexed to the underlying retail rate, or the otherwise applicable rate at the time of export for TOU and other advanced rate design customers.

- ii. Until AMI is deployed for these customers and billing software upgrades are completed to facilitate the Dispatch Credit, non-NEM customers shall receive an Interim Dispatch Credit. The Interim Dispatch Credit shall be calculated as a fixed monthly credit that computes the difference between the export rate of customers' underlying interconnection tariff and the retail (or TOU) rate as follows:
- iii. Interim Dispatch Credit = (the sum of the Non-Fuel Energy Charges and all per-kWh charges, adjustments, and surcharges applicable to the customer's rate schedule using February 2022 rates, adjustments, and surcharges (\$/kWh) non-NEM DER tariff export rate (\$/kWh)) x Committed Capacity (kW) x 70% x 2 hours x 30 days. For this calculation the customer's rate schedule is the customer's rate schedule on the SDP Agreement execution date.
- The Interim Dispatch Credit and Dispatch Credit, as applicable, will be zeroed out at the end of the year.
- v. Non-NEM customers shall receive the Interim Dispatch Credit and Dispatch Credit, as applicable, for the 10-year program duration.

Deleted: first three (3) years of Battery Bonus Program participation, Dispatch Period from

Deleted: be compensated a

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Deleted: Fixed monthly export credit = (retail rate as of February 2022 rateInterim Dispatch Credit

Deleted: Fixed monthly export credit

Deleted: After the first year, Company reserves the right to adjust the 70% factor in the fixed monthly export credit equation upon delivery of supported documentation to justify a different rate Non-NEM customers shall receive the

- c) Energy discharged during the Dispatch Period from the Battery Storage Facility may either serve onsite load or be exported to the grid. Customer Battery Storage-Operator enrolled in Scheduled Dispatch is required to manage their DER systems to automatically prioritize battery charging during periods of substantial solar panel insolation in order to most reliably serve the two-hour battery discharge commitment as scheduled by the Company.
- d) Customer Battery Storage-Operator shall use the default ramp rate of equipment for the Committed Capacity during the Dispatch Period. Deviations from the default ramp rate may be required in certain circumstances where the default ramp rate may pose adverse impacts to grid power quality. The Company will notify the Customer Battery Storage-Operator of any such deviation when the Dispatch Period is specified or revised.
- Term and Termination. This Agreement shall continue for ten (10) years from the 6. commencement of the discharge of Committed Capacity for the Dispatch Period in accordance with this Agreement. Customer Battery Storage-Operator may terminate this Agreement at any time with sixty (60) days written notice. If termination occurs prior to completion of its ten-year commitment, Customer Battery Storage-Operator shall return a prorated portion of the compensation received pursuant to the SDR Tariff. The prorated portion of the compensation shall be based on the remaining portion of the ten-year commitment, calculated from the date of termination as a fraction of the Customer Battery Storage-Operator's ten-year commitment. Customer Battery Storage-Operator may either pay such owed amount in full or make other arrangements with the Company prior to termination. The Company will not charge interest on a payment if final payment is made within one year of date of termination. Company may terminate this Agreement at any time if Customer Battery-Storage Operator fails to comply with any term of this Agreement, the Underlying Agreement, or if the Customer Battery-Storage Operator fails to be an Eligible Customer Battery-Storage Operator.
- 7. Failure to Perform. If the Company identifies concerns or issues relating to the Battery Storage Facility's performance, including, without limitation, potential non-compliance with this Rule pertaining to the discharge of Committed Capacity for the Discharge Period, the Company may conduct a performance audit to monitor and document conditions.

Sheet No. 49.31-D.1 Effective March 1, 2022

- a) The Company shall provide the Customer Battery Storage-Operator written or digital notice at least seven (7) days in advance of any performance audit.
- b) Customer Battery Storage-Operator shall be required to provide five (5) minute interval data, if possible, fifteen (15) minute intervals as necessary to verify operation of the Battery Storage Facility in accordance with this Agreement with five (5) business days of request from Company.

Superseding Sheet No. 49.31-E Effective July 1, 2021 Revised Sheet No. 49.31-E Effective March 1, 2022

- c) If the Battery Storage Facility fails to perform in compliance with this Rule, the Company will provide to the Customer Battery Storage-Operator a written notice of Failure to Perform, which will include documentation explaining the noncompliance of operation.
- d) Customer Battery Storage-Operator will have 30 days from the date of such notice of Failure to Perform to cure the non-compliance. <u>The Eligible Customer Battery</u> <u>Storage Operator may request a reasonable extension of the cure period for good</u> cause shown, for which the Company shall not unreasonably withhold.
- e) If the non-compliance persists beyond the applicable cure period, Customer Battery Storage-Operator (recipient of the one-time Incentive Payment, Monthly Peak Capacity Payment and Monthly fixed export credit (as applicable)) will not receive the monthly payments and may be charged up to \$150 monthly until either the non-compliance is rectified or the Company has recovered the full prorated compensation paid to Customer Battery Storage-Operator pursuant to the SDR Tariff.
- Scope of Agreement. The Parties understand and agree that this Agreement is contingent upon the Underlying Agreement and applies only to the operation of Customer Battery Storage-Operator's Battery Storage Facility as specified by the Scheduled Dispatch Program.
- 9. Metering. Within fifteen (15) days of execution of this Agreement, the Company will supply, own, and maintain all necessary meters and associated equipment utilized for billing and energy purchase. The meters will be tested and read in accordance with the rules of the Commission and the Company. The Customer Battery Storage-Operator at its expense, shall provide, install and maintain all conductors, service switches, fuses, meter sockets, meter instrument transformer housing and mountings, switchboard meter test buses, meter panels and similar devices required for service connection and meter installations on the Customer Battery Storage-Operator's premises in accordance with the Company's Rule 14H.
- 10. <u>Compensation.</u> The terms regarding compensation to the Customer Battery System-Operator for its participation in the Company's Scheduled Dispatch Program shall be as set forth in the SDR Tariff. If the battery system operator and owner of the battery facility are the same and has an account with Hawaiian Electric, that individual or entity must sign the Battery Bonus Program agreement.
- 11. **Data and Private Information.** Company access to personal data, including information for tax reporting purposes, data related to the Battery Storage Facility performance and usage, electrical utility account information, usage history, and meter data is required for enrollment under the Company's Scheduled Dispatch Program. All data access, use, and sharing is subject to the terms of Hawaiian Electric's Customer Information Privacy Policy (available at https://www.hawaiianelectric.com/privacy-notice/customer-information-privacy-policy) and applicable law.
 - a) By executing this Agreement, Customer Battery Storage-Operator approves and consents to provide data required for enrollment under Scheduled Dispatch Program.

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Superseding Sheet No. 49.31-E Effective July 1, 2021 Revised Sheet No. 49.31-E Effective March 1, 2022

b) Tax Identification Number ("TIN") must be provided to Company via secure transfer prior to the Company executing this Agreement.

Sheet No. 49.31-F Effective July 1, 2021

12. Indemnification.

a) The Customer Battery Storage-Operator shall indemnify, defend and hold harmless the Company and its officers, directors, agents and employees, from and against all liabilities, damages, losses, fines, penalties, claims, demands, suits, costs and expenses (including reasonable attorney's fees and expenses) to or by third persons, including the Company's employees or subcontractors, for injury or death, or for injury to property, arising out of the actions or inactions of the Customer Battery Storage-Operator (or those of anyone under its control or on its behalf) with respect to its obligations under this Agreement, and/or arising out of the installation, operation and maintenance of the Battery Storage Facility, except to the extent that such injury, death or damage is attributable to the gross negligence or intentional act or omission of the Company or its officers, directors, agents or employees.

Provided, however, where the Customer Battery Storage-Operator is an agency of the United States, the following Section shall be applicable in place of Paragraph 12(a):

"The United States understands that it may be held liable for loss, damages expense and liability to third persons and injury to or death of persons or injury to property caused by the United States in its engineering design, construction ownership or operations of, or the making of replacements, additions betterment to, or by failure of, any of such party's works or facilities used in connection with this Agreement to the extent allowed by the Federal Tort Claims Act 28 U.S.C. § 2671 et seq. and the Agreement Disputes Act of 1978, 41 U.S.C. §§ 601-613.

Company shall be responsible for damages or injury caused by Company, Company's agents, officers, and employees in the course of their employment to the extent permitted by law." Sheet No. 49.31-G Effective July 1, 2021

Provided, however, where the Customer Battery Storage-Operator is an agency of the State of Hawaii (the "State"), the following Section shall be applicable in place of Paragraph 12(a):

"The State shall be responsible for damages or injury caused by the State's agents, officers, and employees in the course of their employment to the extent that the State's liability for such damage or injury has been determined by a court or otherwise agreed to by the State. The State shall pay for such damage and injury to the extent permitted by law. The State shall use reasonable good faith efforts to pursue any approvals from the Legislature and the Governor that may be required to obtain the funding necessary to enable the State to perform its obligations or cover its liabilities hereunder. The State shall not request Company to indemnify the State for, or hold the State harmless from, any claims for such damages or injury.

Company shall be responsible for damages or injury caused by Company, Company's agents, officers, and employees in the course of their employment to the extent that Company's liability for such damage or injury has been determined by a court or otherwise agreed to by Company, and Company shall pay for such damage and injury to the extent permitted by law. Company shall not request the State to indemnify Company for, or hold Company harmless from, any claims for such damages or injury."

- b) The Company shall indemnify, defend and hold harmless the Customer Battery Storage-Operator, and its officers, directors, agents and employees, from and against all liabilities, damages, losses, fines, penalties, claims, demands, suits, costs and expenses (including reasonable attorney's fees and expenses) to or by third persons, including the Customer Battery Storage-Operator's employees or subcontractors, for injury or death, or for injury to property, arising out of the actions or inactions of the Company (or those of anyone under its control or on its behalf) with respect to its obligations under this Agreement, except to the extent that such injury, death or damage is attributable to the gross negligence or intentional act or omission of the Customer Battery Storage-Operator or its officers, directors, agents or employees.
- c) Nothing in this Agreement shall create any duty to, any standard of care with reference to, or any liability to any person not a party to it.

- 13. <u>Limitation of Liability.</u> Neither by inspection, if any, or non-rejection, nor in any other way, does the Company give any warranty, express or implied, as to the adequacy, safety, or other characteristics of any structures, equipment, wires, appliances or devices owned, installed or maintained by the Customer Battery Storage-Operator, including without limitation the Battery Storage Facility and any structures, equipment, wires, appliances or devices appurtenant thereto.
- 14. Force Majeure. For purposes of this Agreement, "Force Majeure Event" means any event: (a) that is beyond the reasonable control of the affected Party; and (b) that the affected Party is unable to prevent or provide against by exercising reasonable diligence, including the following events or circumstances, but only to the extent they satisfy the preceding requirements: (a) acts of war, public disorder, insurrection or rebellion; floods, hurricanes, earthquakes, lighting, storms, and other natural calamities; explosions or fires; strikes, work stoppages, or labor disputes; embargoes; and sabotage. If a Force Majeure Event prevents a Party from fulfilling any obligations under this Agreement, such Party will promptly notify the other Parties in writing and will keep the other Parties informed on a continuing basis of the scope and duration of the Force Majeure Event. The affected Party will specify in reasonable detail the circumstances of the Force Majeure Event, its expected duration, and the steps that the affected Party is taking to mitigate the effects of the event on its performance. The affected Party will be entitled to suspend or modify its performance of obligations under this Agreement, other than the obligation to make payments then due or becoming due under this Agreement, but only to the extent that the effect of the Force Majeure Event cannot be mitigated by the use of reasonable efforts. The affected Party will use reasonable efforts to resume its performance as soon as possible.
- 15. <u>Additional Information</u>. By signing this Agreement, the Customer Battery Storage-Operator expressly agrees and authorizes Company to (1) request and obtain additional information from Customer Battery Storage-Operator relating to the Battery Storage Facility, and/or (2) make modifications to the Customer Battery Storage-Operator's Battery Storage Facility, at no cost to the Company, where reasonably necessary, to serve the Customer Battery Storage-Operator under this Agreement or to ensure reliability, safety of operation, and power quality of the Company's system.
- 16. Notices. Any notice required under this Agreement shall be in writing and mailed at any United States Post Office with postage prepaid and addressed to the Party, or personally delivered to the Party at the address identified on the last page of the Agreement. Changes in such designation may be made by notice similarly given. Notice sent by mail shall be deemed to have been given on the date of actual delivery or at the expiration of the fifth day after the date of mailing, whichever is earlier.

17. Miscellaneous.

- a) Governing Law and Regulatory Authority. This Agreement was executed in the State of Hawaii and must in all respects be interpreted, governed, and construed under the laws of the State of Hawaii. This Agreement is subject to, and the Parties' obligations hereunder include, operating in full compliance with all valid, applicable federal, state, and local laws or ordinances, and all applicable rules, regulations, orders of, and tariffs approved by, duly constituted regulatory authorities having jurisdiction.
- b) Amendment, Modifications, or Waiver. This Agreement may not be altered or modified by any of the Parties, except by an instrument in writing executed by each of them. None of the provisions of this Agreement shall be considered waived by a Party unless such waiver is given in writing. The failure of a Party to insist in any one or more instances upon strict performance of any of the provisions of this Agreement or to take advantage of any of its rights hereunder shall not be construed as a waiver of any such provisions or the relinquishment of any such rights for the future, but the same shall continue and remain in full force and effect. This Agreement contains the entire agreement and understanding between the Parties, their agents, and employees as to the subject matter of this Agreement. Each Party also represents that in entering into this Agreement, it has not relied on any promise, inducement, representation, warranty, agreement or other statement not set forth in this Agreement.
- c) <u>Assignment.</u> This Agreement may not be assigned by any Party without the prior written consent of the other Parties. Such consent shall not be unreasonably withheld.
- d) <u>Binding Effect.</u> This Agreement shall be binding upon and inure to the benefit of the Parties hereto and their respective successors, legal representatives, and permitted assigns.
- e) Relationship of Parties. Nothing in this Agreement shall be deemed to constitute any Party hereto as partner, agent or representative of the other Parties or to create any fiduciary relationship between the Parties.
- f) <u>Limitations</u>. Nothing in this Agreement shall limit the Company's ability to exercise its rights or expand or diminish its liability with respect to the provision of electrical service pursuant to the Company's tariffs as filed with the Commission, or the Commission's Standards for Electric Utility Service in the State of Hawaii, which currently are included in the Commission's General Order Number 7, as either may be amended from time to time.

Sheet No. 49.31-J Effective July 1, 2021

g) Execution of Agreement; Multiple Counterparts. This Agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument binding all Parties notwithstanding that all of the Parties are not signatories to the same counterparts. Signatures may be provided in original ("wet") form or by other means intended to preserve the original graphic and pictorial appearance of the signature, such as a photocopy. A copy of a Party's signature shall be considered an "original" signature for purposes of this Agreement.

Docket No. 2019-0323, Decision & Order No. 37853 filed June 30, 2021. Transmittal Letter Dated July 1, 2021.

Superseding Sheet No. 49.31-K Effective July 1, 2021

Revised Sheet No. 49.31-K Effective March 1, 2022

IN WITNESS WHEREOF, the Parties hereto have caused two originals of this Agreement to be executed by their duly authorized representatives. This Agreement is effective as of the date first set forth above.

CUSTOMER BATTERY STORAGE-OPERATOR

By:	
Signature	Date
Name (Print):	
Company Name (if applicable):	
Title (if applicable):	
HAWAIIAN ELECTRIC COMPANY	
By:To be completed by Company Signature	To be completed by Company Date
Name (Print):	To be completed by Company
Title (if applicable):	_ To be completed by Company
MAILING ADDRESS	

Hawaiian Electric Company Distributed Energy Resources Division P.O. Box 2750 (AT10-SE) Honolulu, HI 96840 HAWAIIAN ELECTRIC COMPANY, INC. Order No.

CERTIFICATE OF SERVICE

I hereby certify that on this date, a copy of the foregoing document, together with this Certificate of Service, were duly served upon the following parties as set forth below:

D-4-	F
Party Dean Nishina	Email
	dnishina@dcca.hawaii.gov
Executive Director	consumeradvocate@dcca.hawaii.gov
Division of Consumer Advocacy	
Department of Commerce and Consumer Affairs	
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President	_
Distributed Energy Resource Council of Hawaii	
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Honolulu, Hawaii 96813	
Attorneys for Hawaii Solar Energy Association	

DATED: Honolulu, Hawai'i, February 4, 2022.

/s/ Blaine Watanabe
Blaine Watanabe
HAWAIIAN ELECTRIC COMPANY, INC.

FILED

2022 Feb 04 PM 16:04

PUBLIC UTILITIES
COMMISSION

The foregoing document was electronically filed with the State of Hawaii Public Utilities Commission's Document Management System (DMS).